Operating manual for Husqvarna sewing machines
OPTIMA 190, 185 & 150

Standard accessories delivered with the machine

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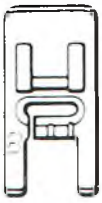
411 77 91-01



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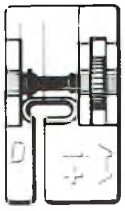

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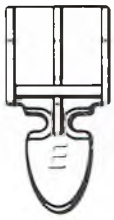

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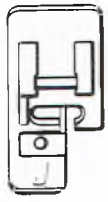

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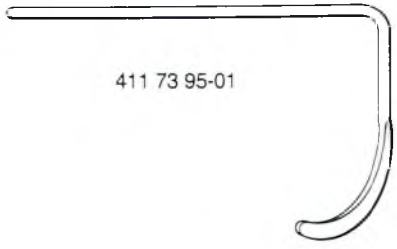

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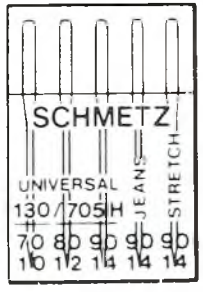

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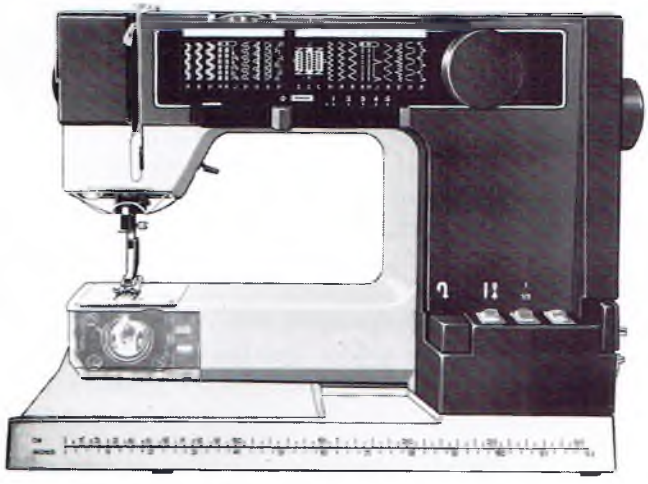

For you and your new sewing machine

We have prepared this booklet, to let you know how to operate this sewing machine and how to make use of all its sewing possibilities.

We are quite sure that you will get many pleasant hours with your new sewing machine and that you will be successful in obtaining many fine results.

HUSQVARNA AB, SWEDEN

We reserve the right to change the machine equipment and the assortment of extra accessories without prior notice, or make modifications in the design or appearance of the machine, which do not negatively affect the function.

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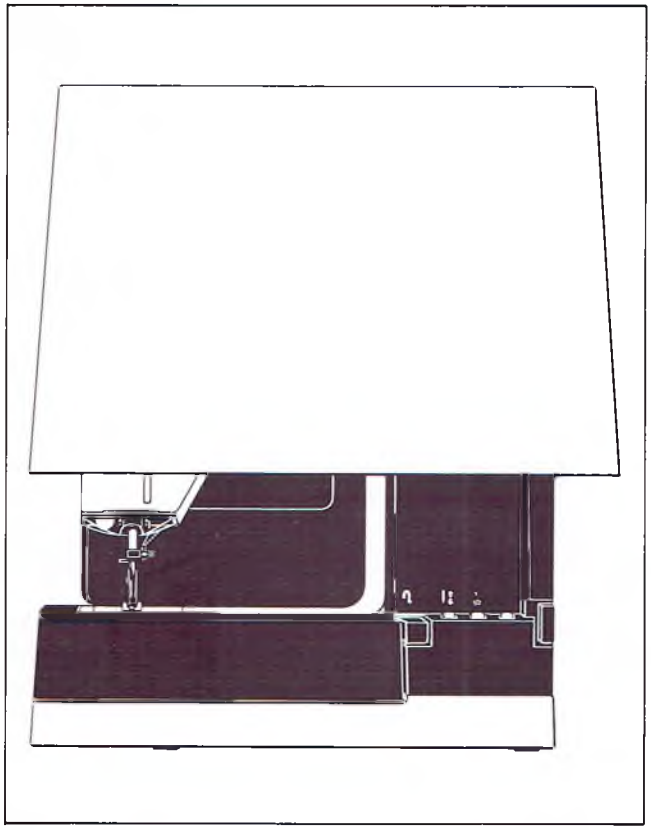
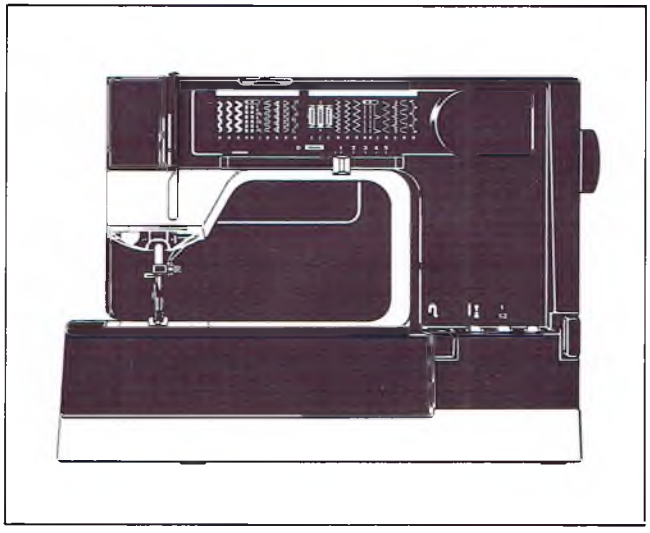


Unpacking

Place the machine on the table, with the recess for the handle furthest away from you, and fold down the handle. Lift off the cover and put it aside. Remove the foot control from the back of the machine.

Wipe the machine clean before you start sewing, and be especially careful with the stitch plate and the space around the needle. The machine is equipped with a number of presser feet and these are packed in two plastic bags. Regarding the placing of the accessories, please refer to page 15 under "Accessory box".



Putting the machine away

Pull the plugs out of the wall outlet and the socket of the machine. Wind the cords around your hand, starting at the foot control and push them into the control compartment.

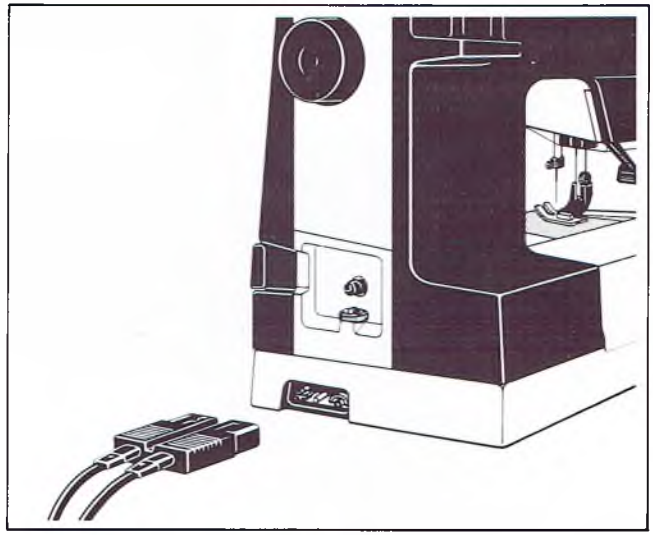
Make sure that all accessories are correctly placed in the box. Slide the accessory box into place.

Lower the presser foot and hang the foot control on the thread guide at the rear of the machine. The bottom of the foot control should be turned toward the machine.

Fold down the handle and put on the cover.

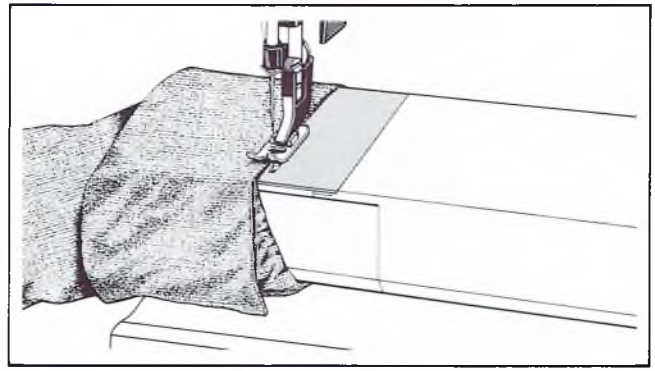
Connecting the foot control

Remove the cord from the foot control and place the control under the table. Insert the foot control plug into the socket on the right-hand side of the machine.



Connecting to the wall outlet

The voltage (V) and frequency (Hz) are indicated under the base of the machine. Check that these values correspond to those of the electricity source before connecting the machine.



Working surface

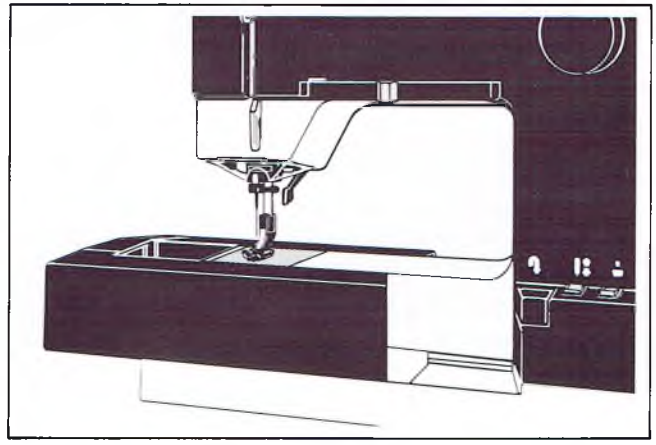
The working surface around the stitch plate consists partly of the upper side of the accessory box and partly of the machine itself, i.e. the free arm.

Retain the accessory box on the machine when you require a larger working surface.

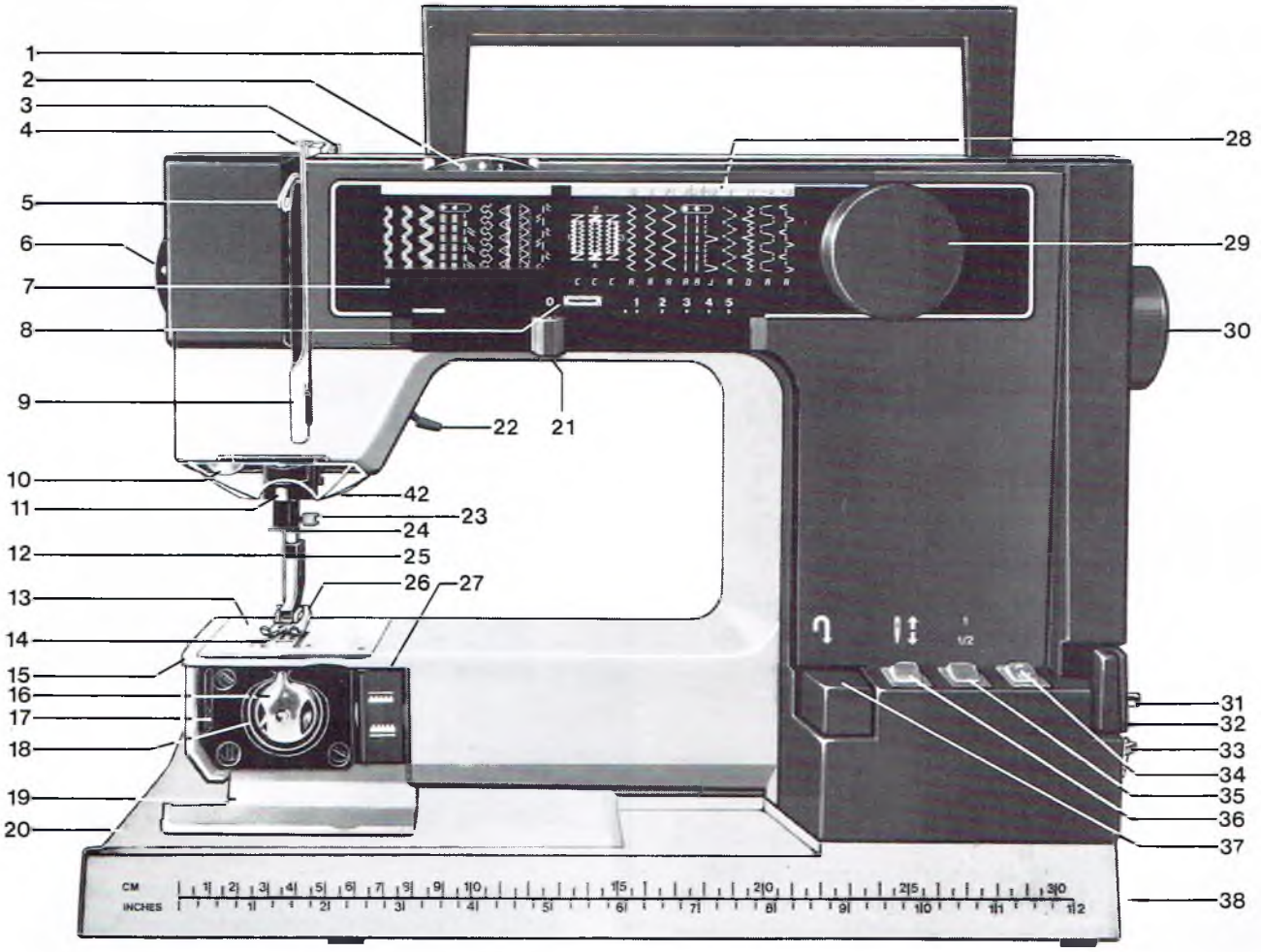
Pull the accessory box to the left and remove it if you wish to use the free arm.

Pant legs and sleeves can be drawn onto the free arm, making it easy to sew, mend or patch these parts.

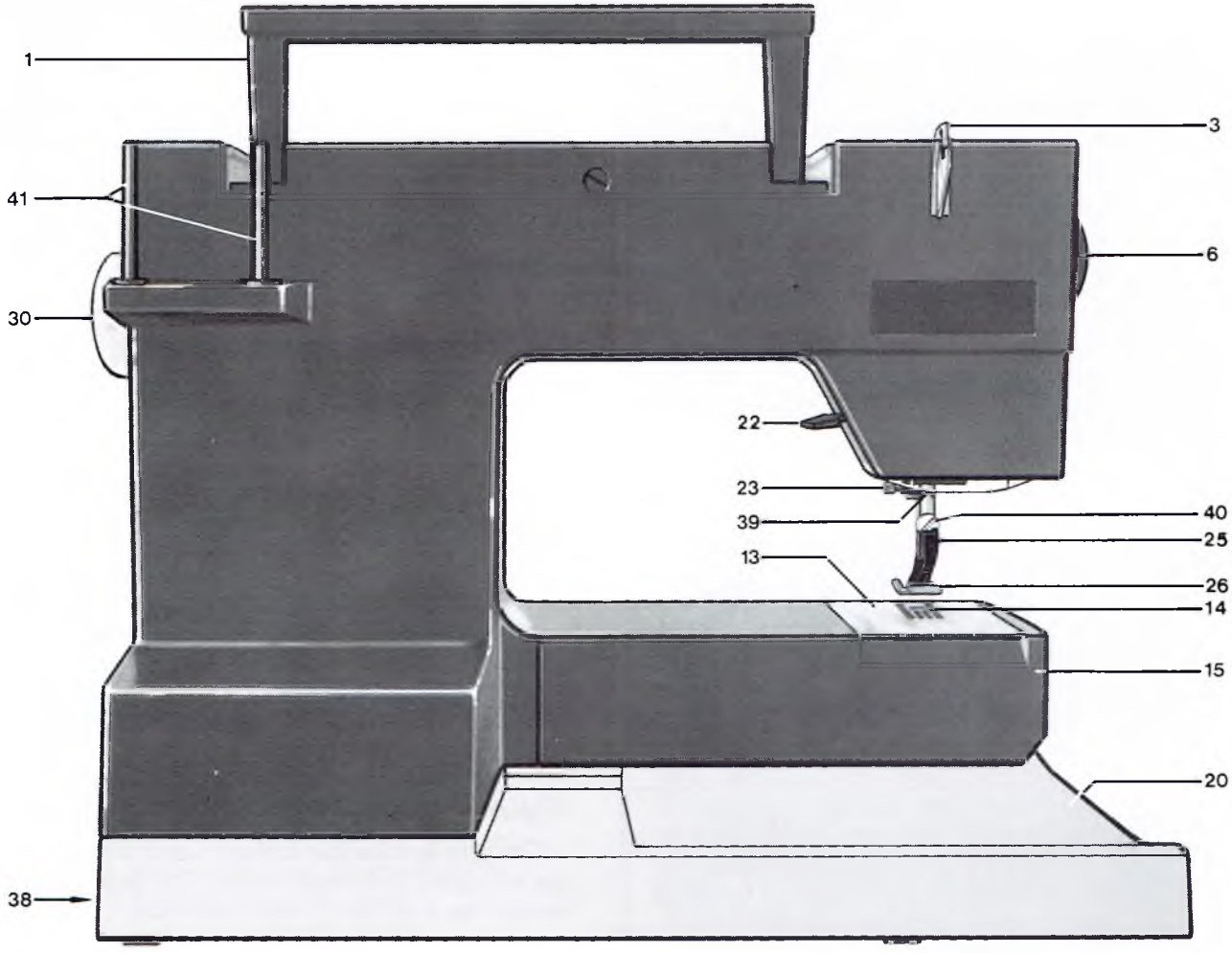
The free arm also makes it much easier to attach collars and cuffs as well as sew children's clothes, or darn socks and stockings on the machine.



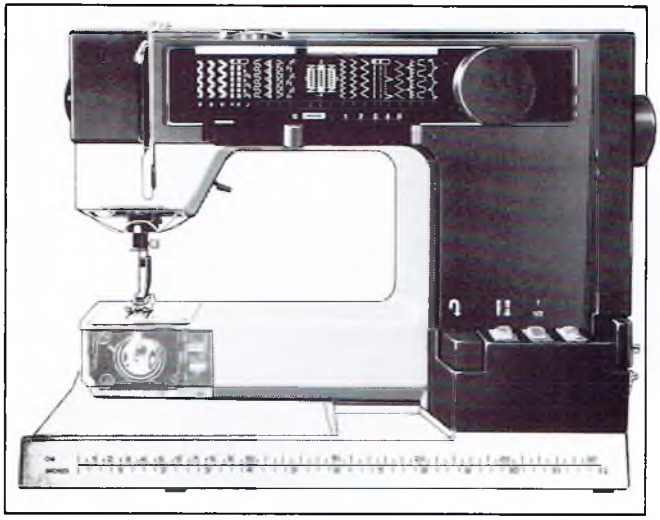
Machine parts · Models 190, 185 and 150



1. Handle
2. Thread tension dial
3. Thread guide
4. Thread tension discs
5. Thread take-up lever
6. Presser foot pressure dial
7. Recommended presser foot
8. Stitch length scale
9. Front thread guide with thread take-up spring
10. Sewing light
11. Needle bar
12. Needle
13. Needle plate (stitch plate)
14. Feed dog
15. Free arm
16. Bobbin case
17. Thread cutter
18. Shuttle (hook)
19. Door for shuttle (hook)
20. Base plate
21. Stitch length regulator
22. Presser bar lever
23. Needle clamp screw
24. Presser bar
25. Presser foot ankle
26. Presser foot
27. Drop feed button
28. Recommended stitch length
29. Stitch selector
30. Handwheel
31. Bobbin winding spindle
32. Bobbin winding arm
34. Main switch
35. Speed control switch (model 190)
36. Needle position switch (model 190)
37. Reverse feed button
38. Socket for foot control
42. Lamp guard



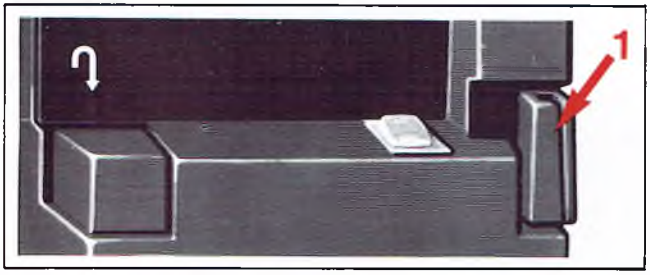
1. Handle
3. Thread guide
6. Presser foot pressure dial
13. Needle plate
14. Feed dog
15. Free arm
20. Base plate
22. Presser bar lever
23. Needle clamp screw
25. Presser foot ankle
26. Presser foot
30. Handwheel
38. Socket for foot control
39. Thread cutter
40. Screw for edge guide
41. Spool pins



Function switches Models 190, 185 and 150

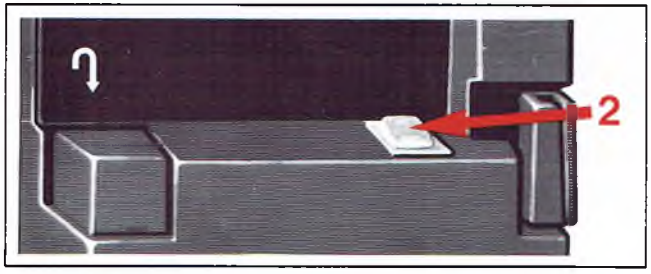
The bobbin winding arm is located on the front of the machine to the far right. The main switch is located to the left of the bobbin winding arm.

Model 190 has two additonal switches (described on the adjacent page). The reverse feed button is located closest to the free arm on all models.



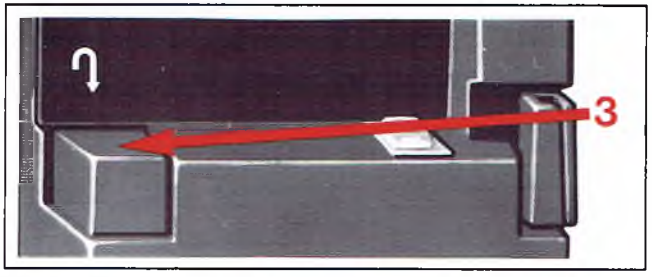
Bobbin winding arm (1)

The bobbin winding arm is for use when bobbin winding. To position it for bobbin winding, grip the lower part and turn it to the right. Read more about bobbin winding on page 11.



Main switch (2)

The light and the machine are turned on by pressing the inner part of the main switch. This makes it easy to see that the machine is ready for sewing.



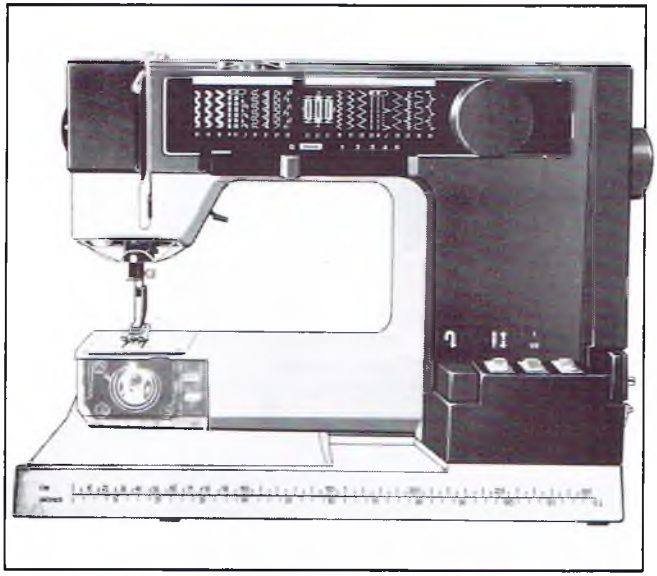
Reverse feed button (3)

As long as you keep the reverse feed button depressed the machine will sew in reverse but will revert to ordinary sewing as soon as you release it. Excellent for fastening off.

The longest stitch length when reverse feeding is 3 mm.

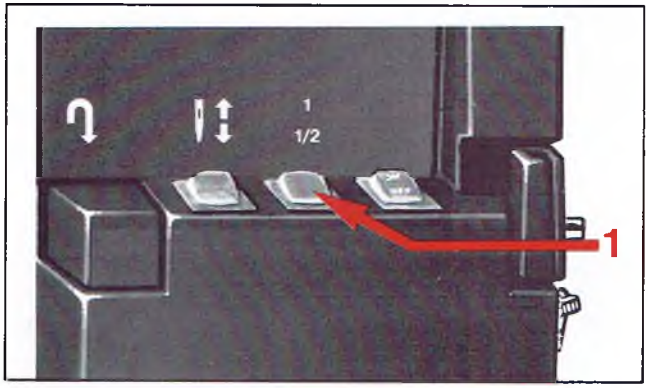
Function switches for model Model 190

In addition to the setting possibilities described for models 185 and 150, model 190 has a switch for reducing the speed and one for setting the needle stop-right position.



Limiting the speed (1)

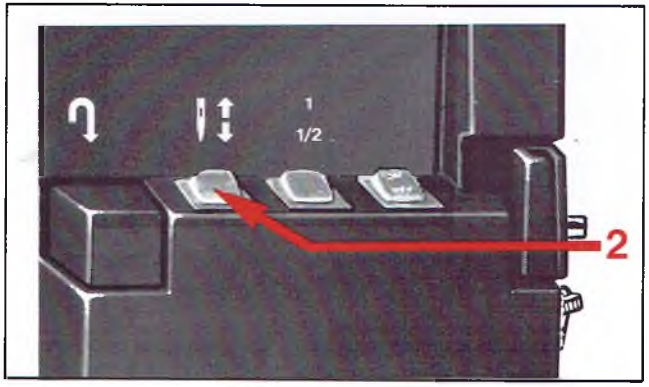
When sewing with the inner part of the switch depressed you can regulate the speed of the machine up to the highest speed. If you push the outer part of the switch down and carefully press the foot control, the machine will initially make a short pause between each stitch. This will give you time to check that you are sewing exactly where you want to. This is a great help for precision sewing and when you wish to move the fabric by hand, e.g. when basting. Remember to lower the feed dog when basting. When you press the foot control again, the machine will sew at an even and slow speed. You have full needle power the whole time. With the foot control completely depressed, the speed will be approximately half of the maximum speed.

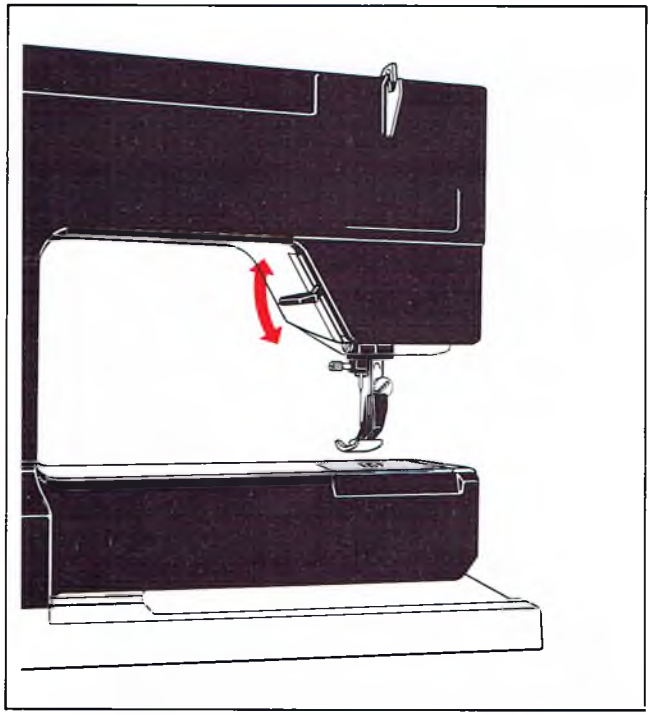


Needle position switch (2)

With this switch you can choose the position at which the needle should stop. When the inner part of the switch is depressed, the needle will stop at its upper position for use when removing the fabric at the end of a seam. When the outer part of the switch is depressed, the needle will stop in the fabric, and hold it securely for pivoting (lifting the presser foot and turning the fabric to sew around a corner).

When the switch is in the intermediate position the needle will stop at any position. You can then turn the handwheel until the needle is in the position you require.

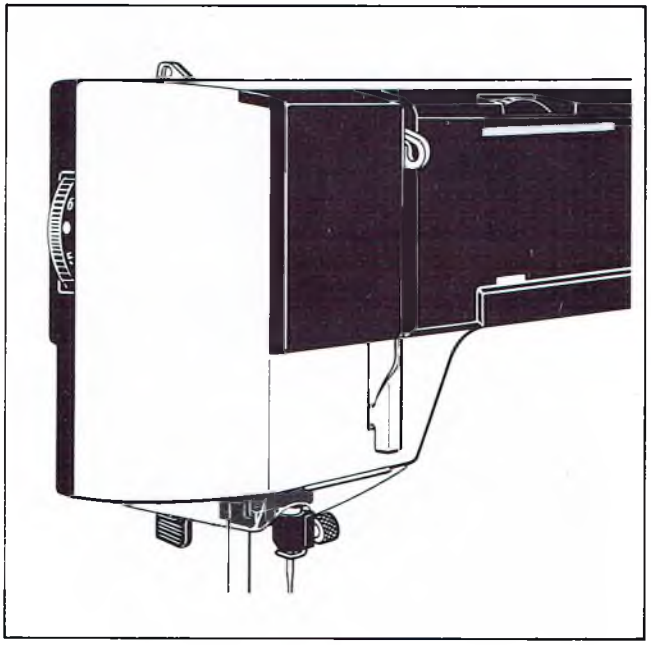




Presser bar lever

By means of the presser bar lever at the rear of the machine, the presser foot can be raised and lowered. When raising, the presser foot will remain in the raised position, but the height can be increased by 3 mm by pushing the presser bar lever upward and holding it in this position. This is useful when you want to put garments with thick seams under the presser foot.

The presser foot should be lowered while sewing.



Presser foot pressure

The presser foot pressure can be adjusted with the aid of a marked dial on the left side of the machine. Normal pressure is obtained by setting the dial at the white dot but for some fabrics it may be better to reduce or increase the pressure. The higher the number, the greater the pressure.

By setting the dial at the symbol the presser foot pressure is completely released. This setting should be used when free-hand sewing with the darning foot, i.e. darning, monogramming, machine embroidery and quilting.

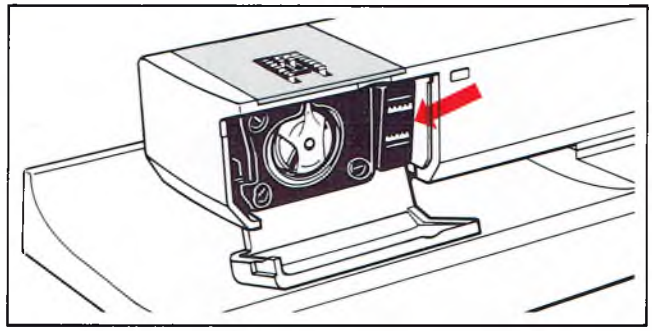
If you turn the graded dial for the presser foot pressure to the lowest number, it is possible to darn with presser foot A.

Lower the feed dog and move the fabric forward, backward and sideways by hand.

Lowering the feed dog

You lower the feed dog by pushing in the upper part of the push-button. In order to raise the feed dog again push in the lower part.

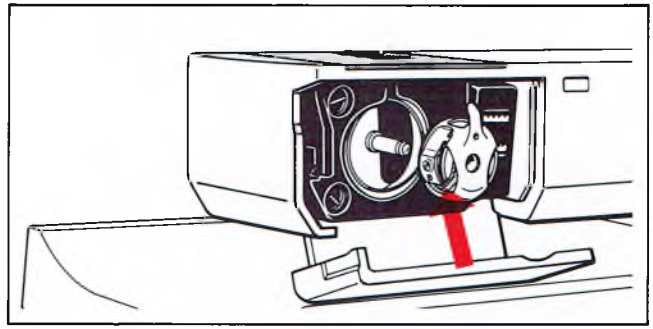
The feed dog should be lowered for a certain type of darning and when sewing on buttons. It is also easier to get thick garments under the presser foot if the teeth of the feed dog are not above the level of the stitch plate.



Removing the bobbin case

Open the door in front of the shuttle by means of the small recess on the left side.

Grip the bobbin case with the thumb and index finger so that the latch is depressed and pull the bobbin case out. The bobbin will remain in the case as long as the latch is depressed. When you release the latch, the bobbin will be released.



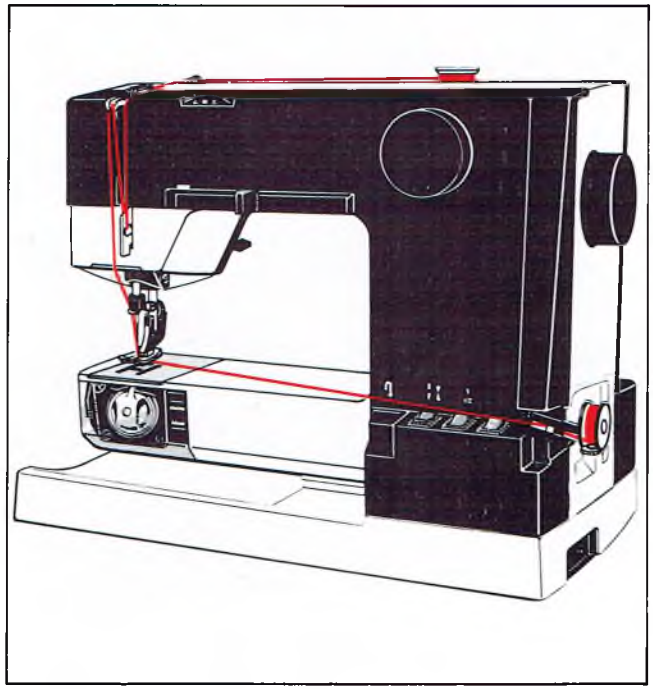
Bobbin winding

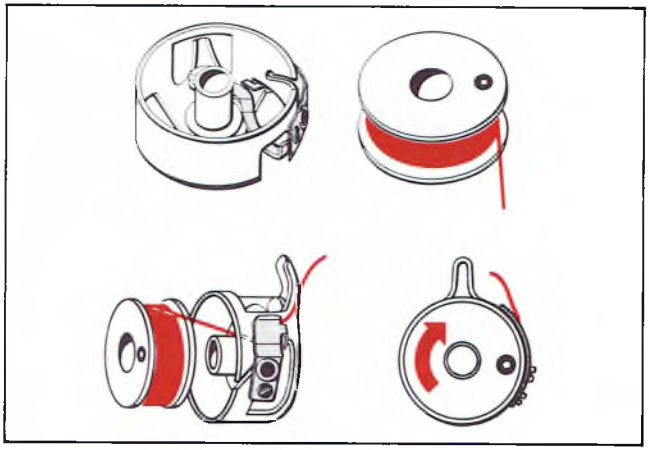
Turn the empty bobbin until the small round mark on one side is outward.

Slide the bobbin onto the bobbin winding spindle located on the right side of the machine.

Grip the lower part of the bobbin winding arm on the right-hand side of the machine and turn it out to the side. Raise the presser foot and pull the thread from the thread guide by the needle clamp through the groove on the arm. Wind the thread around the bobbin a couple of times, begining from underneath. If you are using a metal presser foot, allow the thread to go through the eye of the needle and under the presser foot. Never run the thread direct from the eye of the needle to the bobbin because you will run the risk of bending the needle. Hold the thread end and lightly depress the foot control. As soon as winding starts you can release the thread end.

Model 190 will automatically stop when the bobbin is full. Remove the bobbin and return the arm.



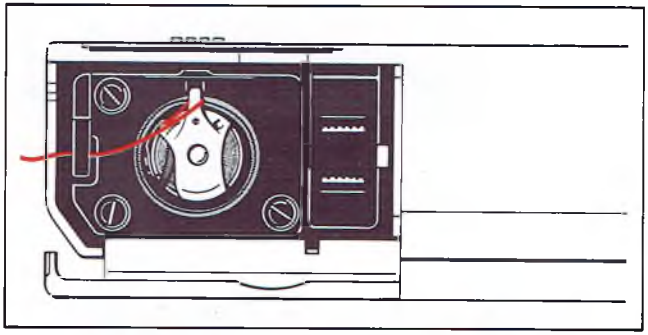


Threading the lower thread

When the bobbin winding is finished, place the bobbin beside its case with the marking upward. The thread should run as shown in the figure. Place the bobbin in its case without turning it around.

Slide the thread into the slot on the edge of the bobbin case. Pull the thread in under the tension spring. Check that the bobbin rotates in the direction of the arrow (clockwise) when the thread is pulled.

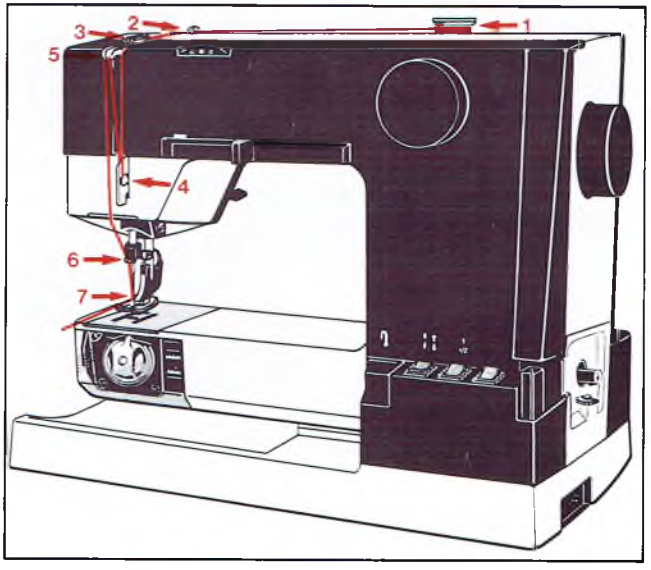
The thread must be pulled in the direction of the spring, otherwise the spring will be overloaded.



Insertion of the bobbin case

Slide the thread behind the projection of the bobbin case and to the right. Put the bobbin case into place. Press the bobbin case until it clicks to ensure that it fits properly.

The thread cutter is located to the left of the bobbin case. Hold the thread end and draw the thread from underneath and up toward the thread cutter. By doing so the thread will be cut off and kept in place.
Shut the door.



Threading the upper thread

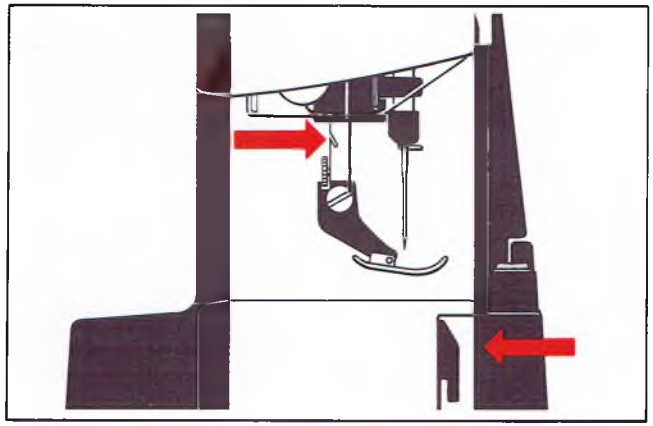
Raise the presser foot. Check that the needle is at its highest position. Place the spool of thread on the left spool pin and thread the machine for sewing.

Slide the thread into thread guide 2 on the upper arm and draw it upward. Then draw the thread to the front between the tension discs 3 and down around thread guide 4. Continue threading by drawing the thread from the right into the slot on thread take-up lever 5 and draw it down to the needle, ensuring that it goes through thread guide 6.

Thread the needle from the front. Due to the white color of the presser foot ankle the needle-eye is clearly seen and the threading of the needle, 7, is easier. Pull the thread under the presser foot about 15 cm (6″) toward the rear.

Thread cutters

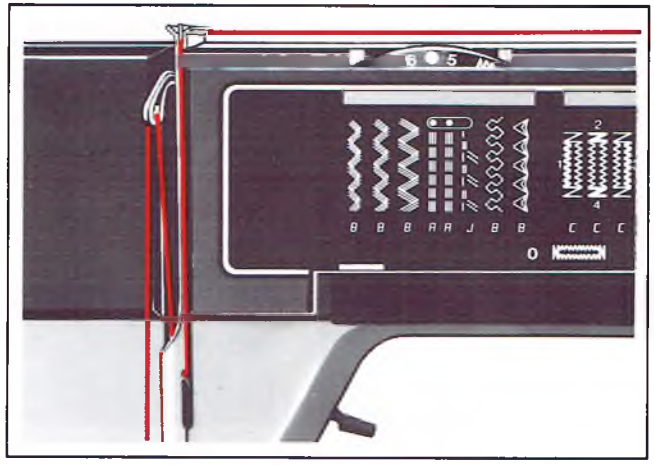
On the back of the presser bar you will find a notch, the thread cutter, by means of which you can easily cut off the threads when you have finished sewing. There is a special thread cutter for the bobbin thread. See page 12 "Insertion of the bobbin case".



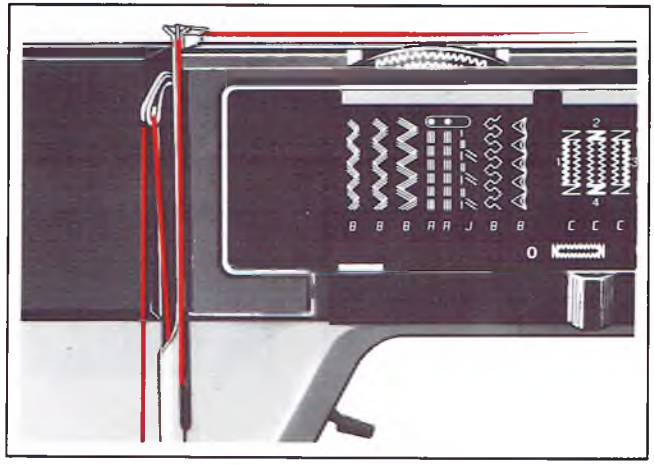
Tension of the upper thread

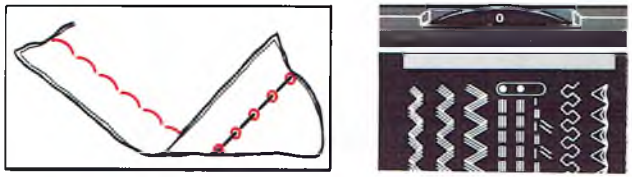
The dial which regulates the tension of the upper thread is graduated from 0–10. The higher the number, the tighter the tension. Normal thread tension is obtained by setting the dial at the white dot. Your machine has been tested using the thread which accompanies it and with the thread tension dial at the white dot.

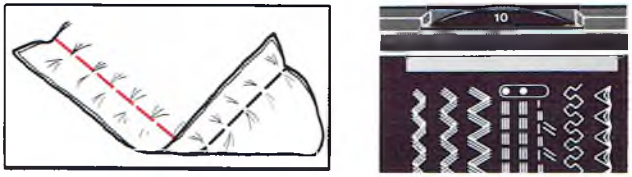
If using a coarser thread, it may be necessary to alter the thread tension slightly. Also the type of fabric may require that the tension be adjusted.

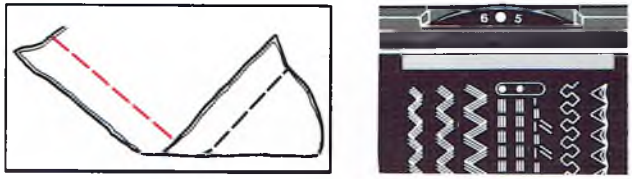


There is also a mark on the thread tension dial for the tension that is suitable for making buttonholes. This setting is also suitable for satin stitching, decorative stitching, topstitching, embroidering, etc.







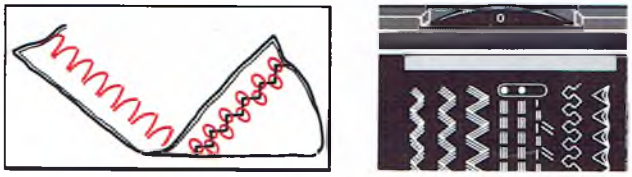


Correct and incorrect thread tension

In order to easily understand the importance of correct thread tension, you can try different thread tensions by sewing on a scrap of fabric. Begin by using an excessively loose tension, i.e. set the tension dial near "0". Look at the fabric and you will find that the lower thread lies straight and the upper thread is drawn underneath the fabric. If, however, you set the dial at the highest number, the opposite will occur, or the seam may pucker.

The thread tension is correct when the threads interlock in the middle of both layers of fabric.

Please note that even the best quality thread may vary in thickness. When sewing in fine fabrics, the knot may sometimes be visible.



Always check that the thread tension is correct by first sewing on a scrap of the same fabric, folded double, that you intend to work with.

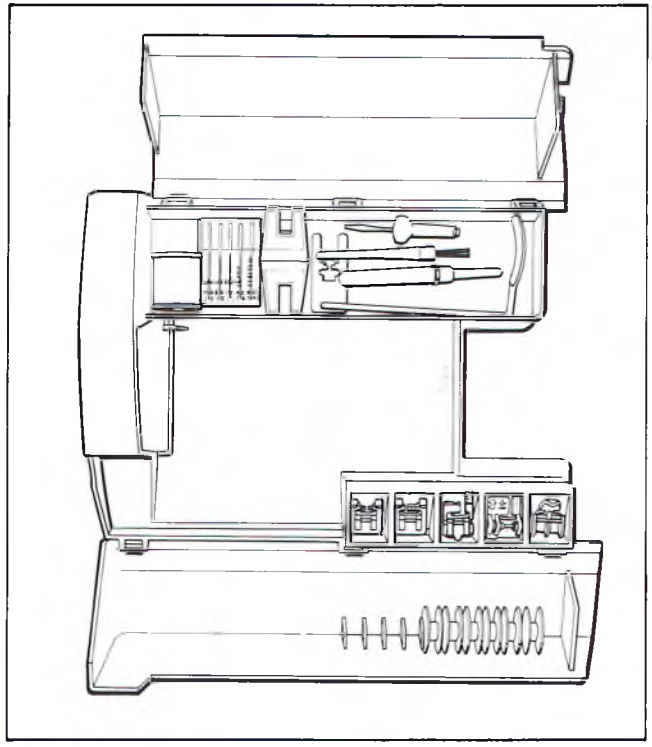
Accessory box

To obtain the best sewing results you should select the correct presser foot for the type of sewing you are doing. The presser feet are marked with letters and under each stitch on the pattern scale you will find a letter which will help you to make the right selection.

By means of these feet you will be able to carry out practically all types of sewing work. There are additional accessories to assist you with special work. These will be found under "Extra accessories" on pages 46–48.

Store the accessories in the accessory box. By placing them as illustrated, it will be easier for you to remove and replace the box.

A list of the accessories which accompany the machine will be found on the loose sheet which is included but we reserve the right to change the equipment of the machine and the assortment of extra accessories without prior notice.

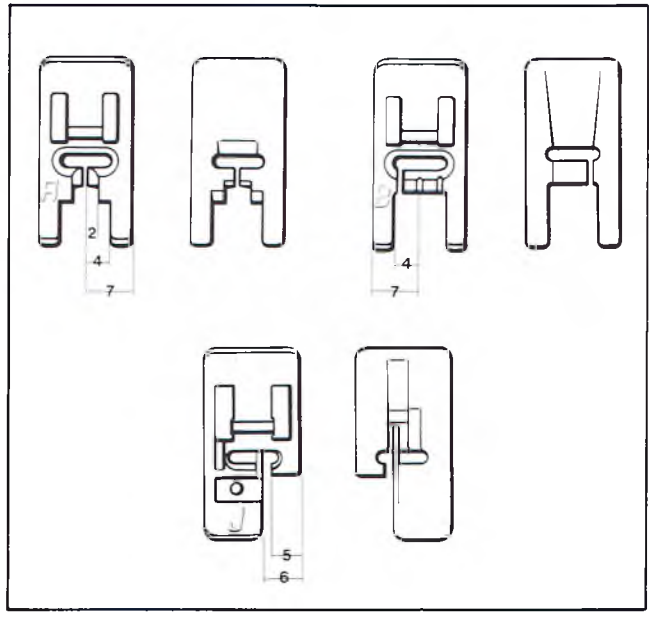


Presser foot A

The presser foot which is fitted on the machine at delivery is marked A. This foot is used mainly for straight stitching, zig-zag stitching with a stitch length longer than 1 mm and for some other stitches as well.

Presser foot B

When sewing close zig-zag stitches with less than 1 mm stitch length, decorative stitches or seams in thick knits, you should use presser foot B. The bottom of the foot is designed to give more space for satin stitches on thick fabrics.

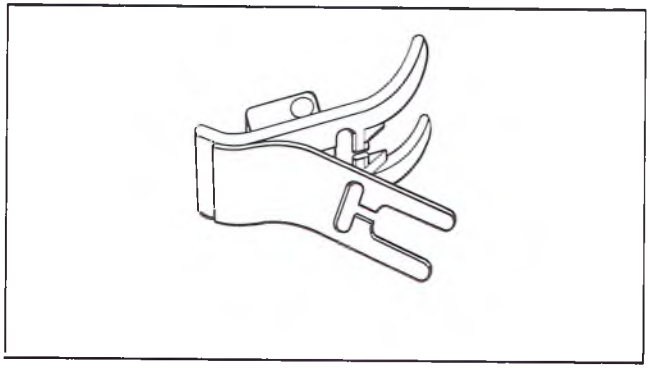


Presser foot J

This foot is used for overcasting, joining and overcasting, i.e. stitches which have a stich width of 5 mm. The pin prevents puckering at the edge of the fabric.

Various markings

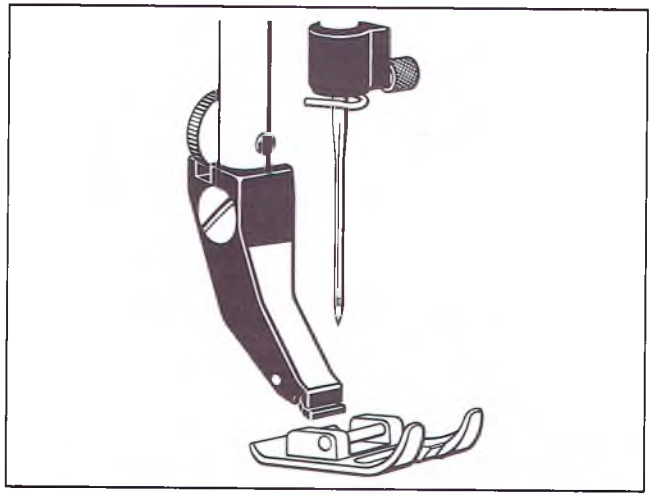
As you can see from the illustration, the above presser feet have notches or markings which can be used as guides when sewing. When straight stitching with the needle in the center position, you will have a 7 mm (¼″) seam allowance if you guide the fabric even with the outer edge of the foot; 4 mm (3⁄16″) at the inner edge and 2 mm (3⁄32″) at the innermost notch on presser foot A.



Glide plate

The glide plate fits presser foot A. This plate can be used when sewing on foam plastic, plastic-coated fabric and leather imitations. It will minimize the risk of these materials sticking to the presser foot.

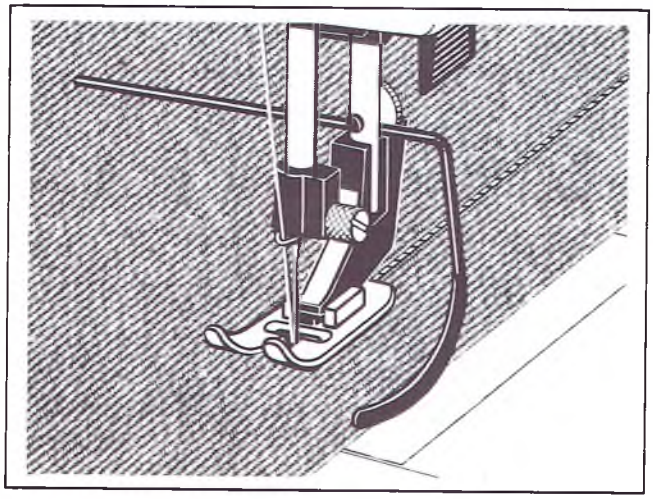
Peel off the protective paper and press the self-adhesive side of the glide plate against the underside of the presser foot.



Changing the presser foot

If you wish to change the presser foot, check that the needle is at its upper position. Remove the presser foot by drawing it toward you while pressing slightly downward.

Insert the new presser foot in such a way that the round, horizontal pin fits in between the spring and the presser foot ankle. Press slightly downward and backward and the foot will snap into place.



Edge guide

The stitch plate has markings for 1.0, 1.5, 2.0, 2.5 and 3.0 cm, to simplify sewing seam allowances. If you require an even wider seam allowance, use the edge guide.

First loosen the screw at the rear of the presser bar as far as it will go. Insert the guide into the groove under the screw and adjust it to the required seam allowance. Tighten the screw, using the screwdriver.

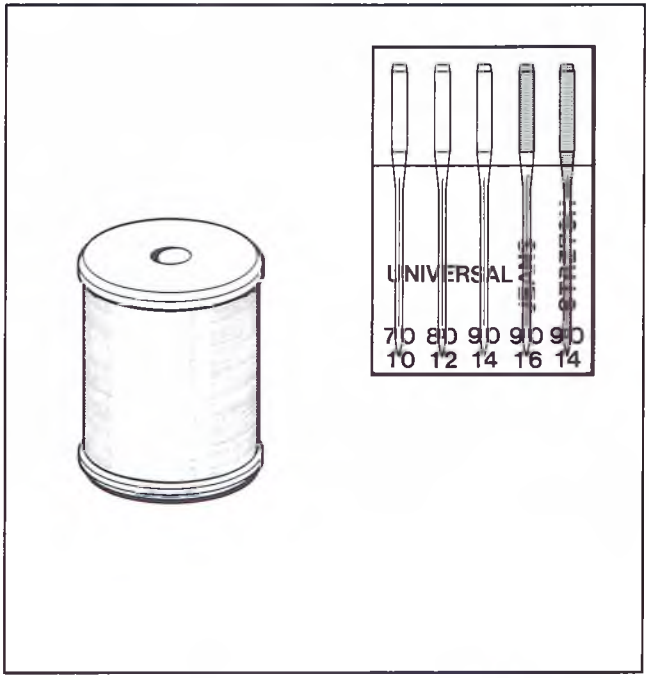
Needle and thread

The machine is delivered with a spool of synthetic thread, which can be used for all types of fabrics and most seams. Mercerized cotton can also be used.

When sewing decorative stitches, embroidery silk No. 30-50 is generally used. It produces attractive buttonholes and topstitching and can also be used for darning.

Always use the recommended needles (code 130/705H). The size is denoted by a number. The needle fitted in the machine is No. 80.

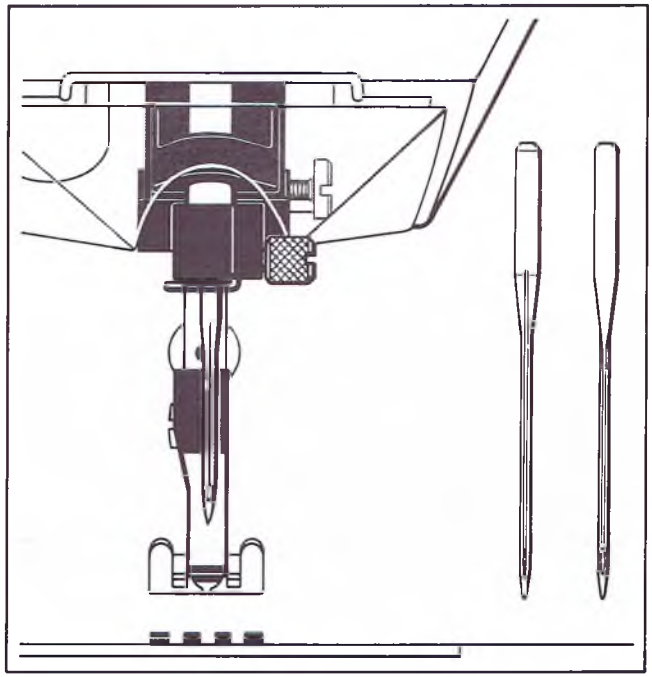
The needle case contains one more needle of this size, one needle No. 70 which is intended for fine thread and light, compact fabrics, and one needle No. 90 which should be used for coarser thread and fabrics. The two needles for sewing in stretch fabric and denim are specially designed for the purpose.

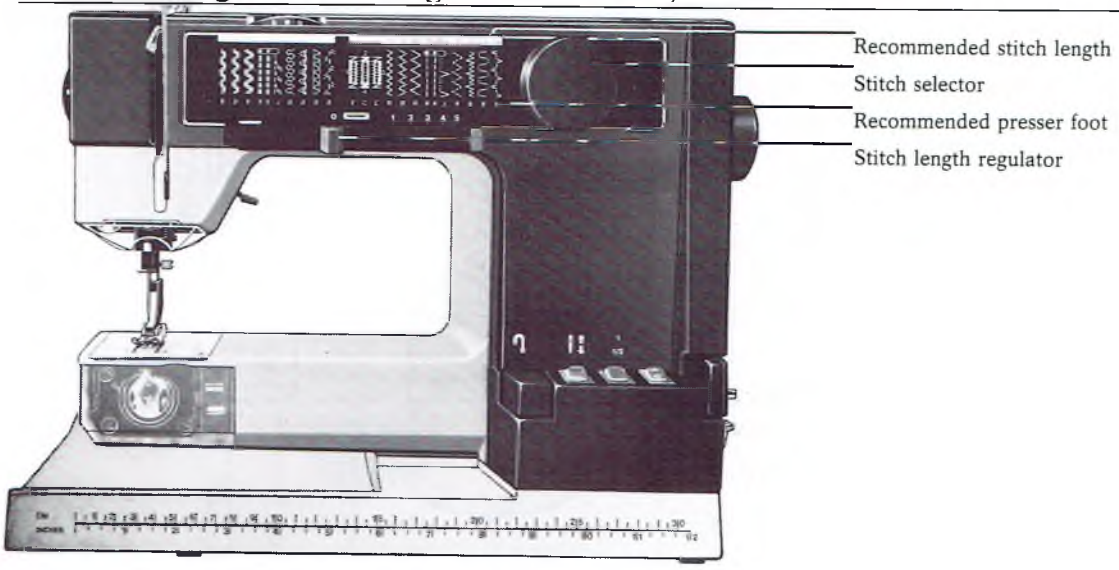


Changing the needle

Even if the needles look alike there can be slight variations which can affect the sewing result. Be sure to use high quality needles.

Only a completely undamaged needle will give perfect sewing results. Therefore, change the needle if you have the slightest reason to believe that it is bent or that the point is damaged. To remove the needle, loosen the screw in the needle clamp. With the flat side of the shank away from you, insert the new needle into the needle socket as far as it will go. Tighten the screw with the screwdriver.





Stitch selection

The pattern scale located on the front of the machine indicates which stitches you can sew with the machine. The stitches are devided into two groups. The stitch length for the group on the right can be varied between 0 and 5 mm and there are three zig-zag widths to choose from.

The stitch length is fixed for the group on the left. When you wish to use one of these stitches, shift the stitch length regulator to the red marking ▬ on the left. You have the choice of three different widths for reinforced zig-zag (Ric-Rac). Ordinary and reinforced straight stitch can be sewn with the needle at the center or left needle position. The left needle position is suitable when sewing narrow hems and when sewing in light fabrics where the fabric is well supported in the outer edge of the needle hole.

The required stitch is set by turning the stitch selector to the left or to the right until the red indicator lines up with the stitch symbol.

Choice of stitch length

There are figures above the stitch symbols which indicate the most suitable stitch length when sewing normal fabrics.

Set the stitch length by means of the stitch length regulator under the symbols. The symbol N〰N indicates the stitch length which is best for sewing buttonholes.

Always use the recommended stitch length to start with but experiment until you arrive at the exact stitch length for the actual work you will be doing.

Presser foot

There are letters under the stitch symbols which indicate the most suitable presser foot for each stitch. The letter is also marked on the presser foot.

General hints

The best way to hold the fabric is to let your left hand rest lightly on the work at A and guide it forward. Hold the edge of the fabric at B with your right hand and guide the work. Do not pull the fabric – just guide it toward the presser foot and let the machine do the feeding.

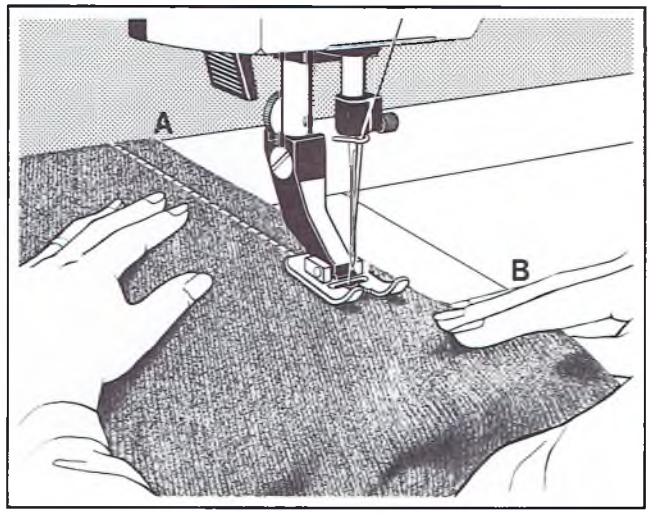
When you wish to straight stitch, place the work so that the needle goes down in the center of the marking for the seam. When sewing zig-zag and other wide stitches, e.g. overlock stitches place the marking for the seam along the left edge of the needle hole.

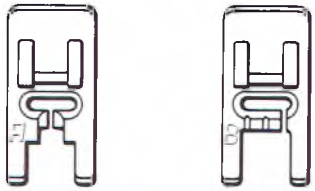
Lower the presser foot, start the machine gently and increase the speed gradually.

When sewing fine and soft fabrics, start the seam a couple of mm (⅛″) from the edge of the fabric, to prevent it from being pulled down into the needle plate hole. If you wish to extend the seam out to the very edge of the fabric, sew a few reverse stitches and then hold the threads behind the presser foot when sewing forward again.

If you have model 190 and are going to sew a long seam, when you must stop often to arrange the work or when you wish to pivot at a corner, use the lower needle stop position.

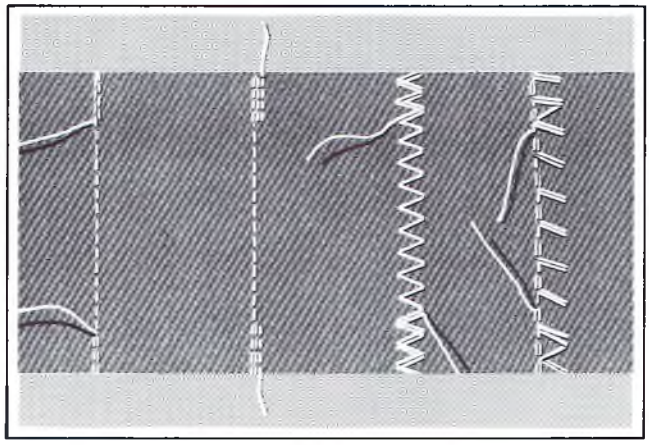
When sewing short seams or when finishing off a seam, use the upper needle stop position.

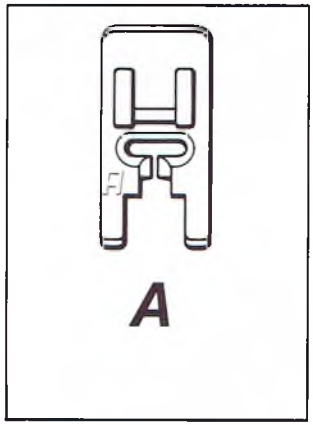


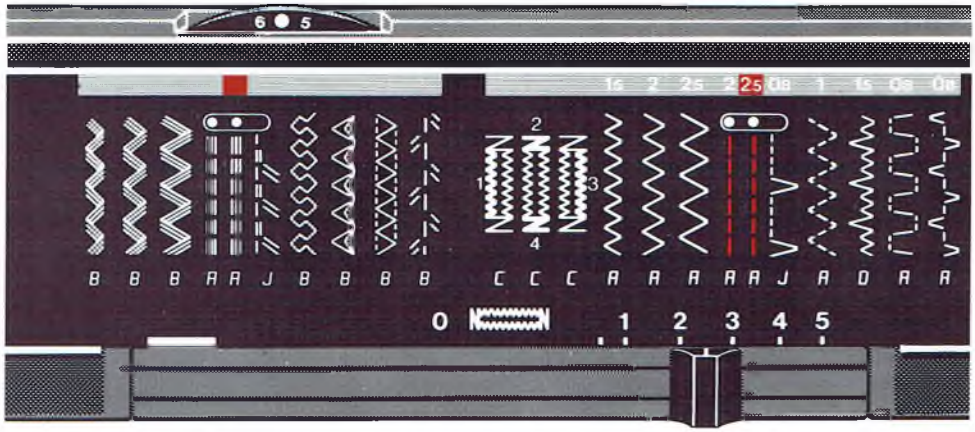


Fasten off the seam by depressing the reverse feed button and sew a few reverse stitches.

When the seam is finished, raise the presser foot, remove the work from behind and cut off the threads leaving at least 15 cm (6″) of thread behind the needle.







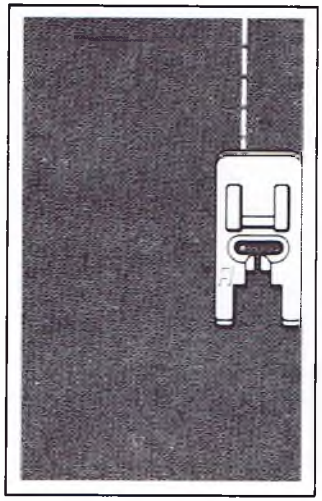
Straight stitching

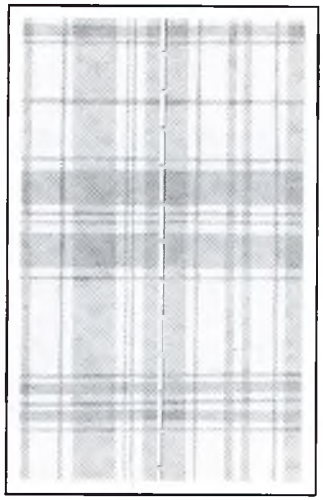
Check that the needle is in the highest position. Turn the stitch selector to the straight stitch symbol.

Set the stitch length regulator to the recommended basic setting 2.5 but experiment until you arrive at the exact stitch length for the actual work you will be doing.

Straight stitching is used to join fabric which does not stretch and for seams which will not be subjected to great strain. When an elastic stitch is required for sewing stretch fabrics, use the reinforced straight stitch or overlock stitch. The overcast stitch is very suitable for sewing light fabrics.

It is even possible to do straight stitching with the needle in the left needle position, as illustrated below. It is very useful when you wish to sew a seam near a thick edge where it is difficult to manage with the presser foot or when sewing narrow hems. When sewing with the needle in this position let the presser foot follow the edge of the fabric and you will have a seam allowance of 1 cm (3/8").





Topstitching

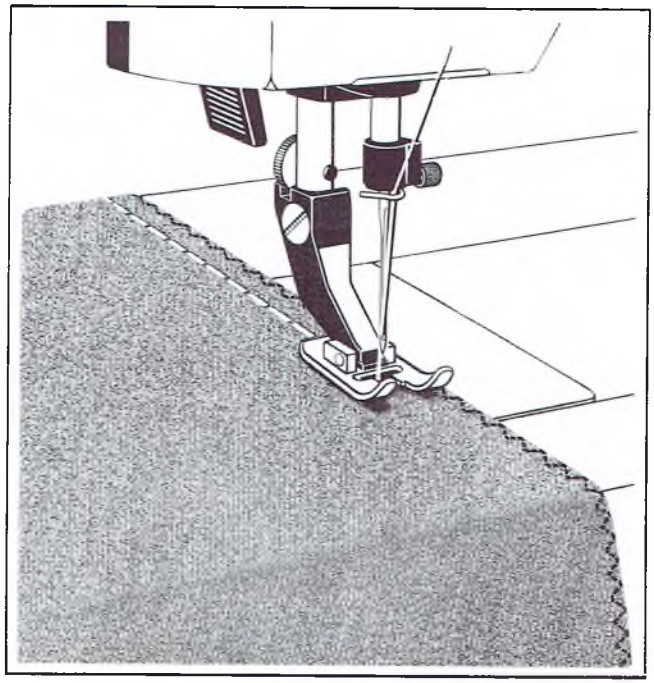
When topstitching on lighter fabrics, it is preferable to use a rather fine thread and needle. The illustration shows topstitching on medium light cotton, sewn with an ordinary straight stitch. Use a slightly longer stitch length than for ordinary sewing. Topstitching must be sewn on double fabric. A thick thread will give more pronounced topstitching when sewing in heavier fabric.

Basting

When sewing simpler garments you can save time by inserting pins at right angles to the seam. Then sew the seam removing each pin as you come to it. If you are careful, use fine pins, and relatively long stitches, you can sew right across the pins. However, this involves a risk of blunting the needle, or breaking the needle or pins.

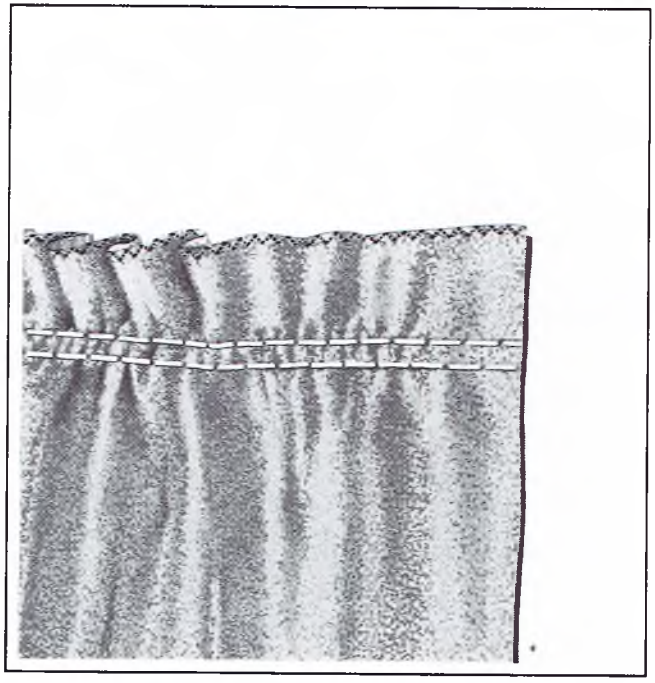
Machine basting allows you to try on the garment before sewing it together. Pin the seams as described above. Set the stitch length to 3–4 for light fabrics, to 4–5 for normal and heavier fabrics. Set the thread tension dial at the buttonhole symbol. Stitch.

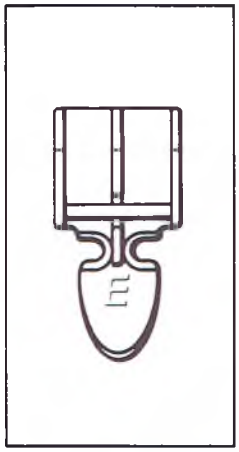
Remove the basting by pulling out the lower thread.

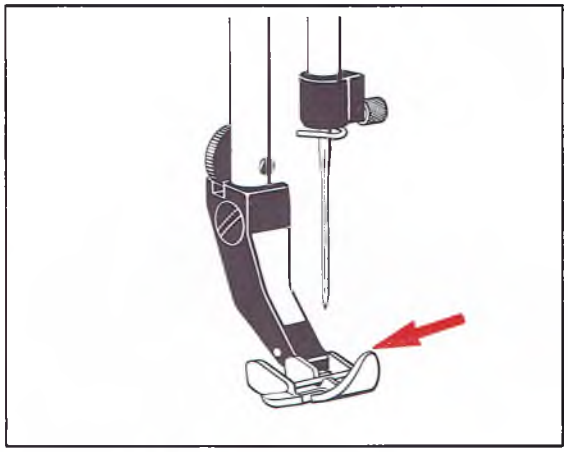


Gathering

Gathering with the straight stitch is the most common method. The best results are obtained if stitch length 3–3.5 is used and the upper thread tension decreased to the buttonhole symbol. Two rows of gathering stitches are sewn side by side – the lower threads from both rows are then pulled simultaneously to produce the gathering.

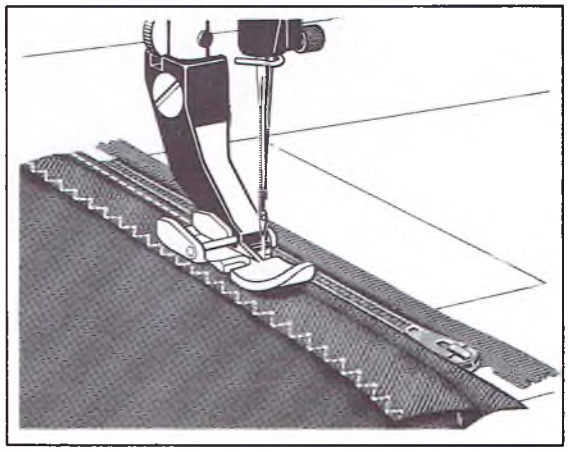






Sewing in zippers

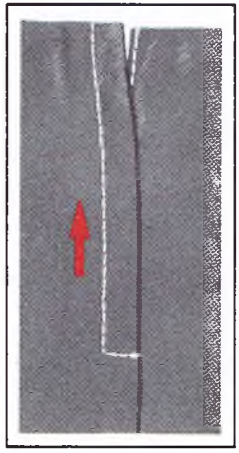
The zipper foot E can be attached so that it is located either to the right or to the left of the needle, making it easy to sew both sides of the zipper.

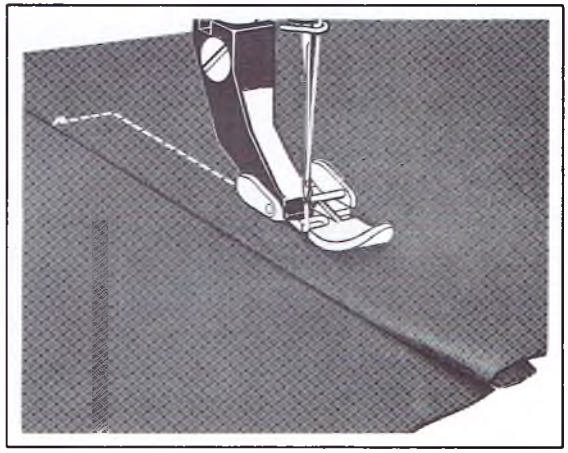


Lapped zipper

Baste the opening together with a decreased upper thread tension and long stitches. Leave approx. 2 cm (¾″) open at the top. Turn the work so that the wrong side is up. Fold the left seam allowance outward a couple of mm from the basted seam.

Attach the zipper foot to the left of the needle. Use the lower needle stop position if you have model 190. Place the zipper with the right side up under the folded seam allowance and sew the right edge of the zipper, starting at the bottom. Open the zipper a couple of cm (1″) before the seam is finished, raise the zipper foot and pull the tab behind the foot. Lower the foot and finish the seam.





Move the zipper foot to the right of the needle. To sew the other edge of the zipper on the right side of the fabric, start with perpendicular stitching at the lower edge and then sew from the bottom to the top. Remove the basting.

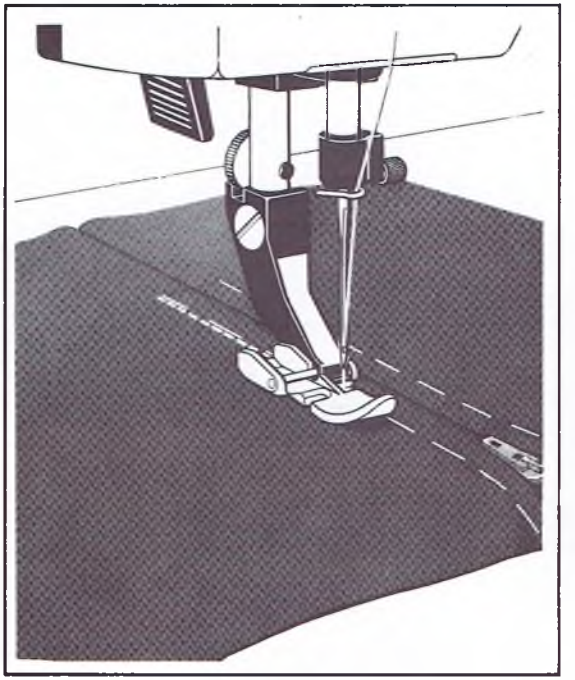
Slot zipper

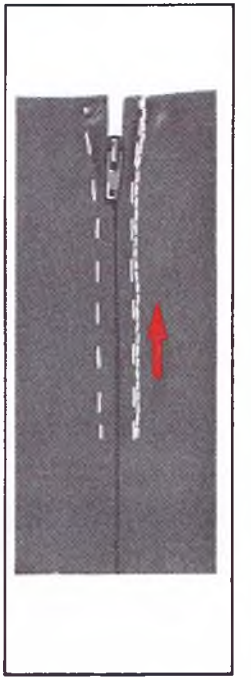
Baste the opening together by machine with long stitches and decreased upper thread tension. Leave about 1″ open at the top.

Press the seam open and baste or tape the zipper under the seam.

Place the zipper foot E to the left of the needle.

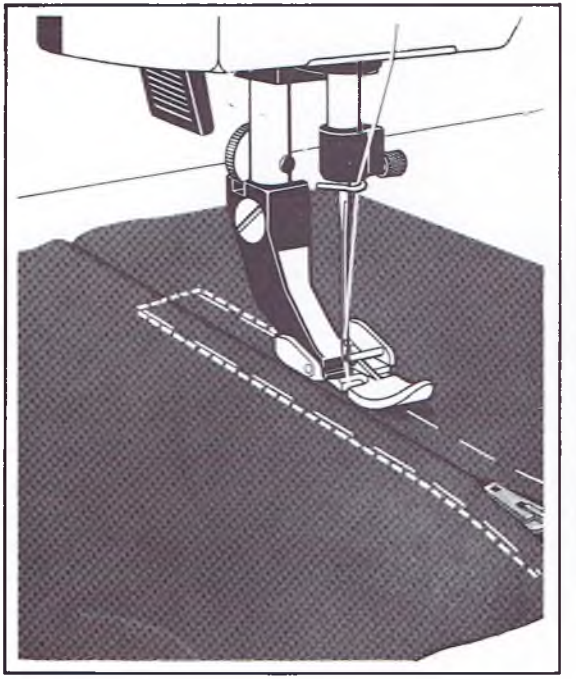
Use the lower needle stop position if you have model 190. Start at the bottom and sew the right edge of the zipper as illustrated. Open the zipper before the seam is finished, raise the zipper foot and pull the tab behind the foot. Lower the foot and finish the seam.

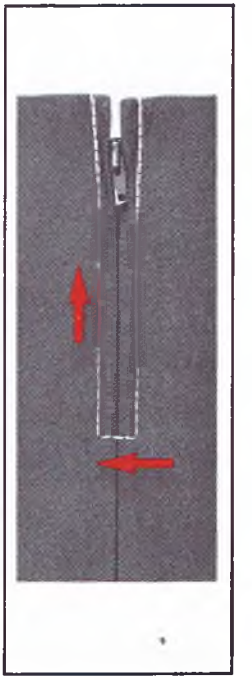


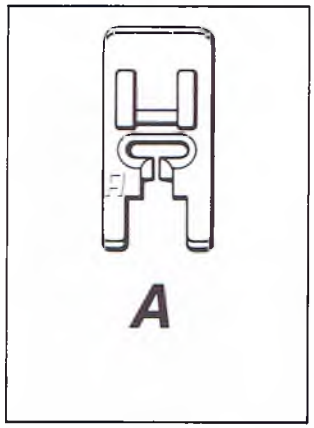


Move the zipper foot to the right of the needle. Start with perpendicular stitching at the lower edge, turn the garment and sew the other edge of the zipper as illustrated.

Remove the basting.







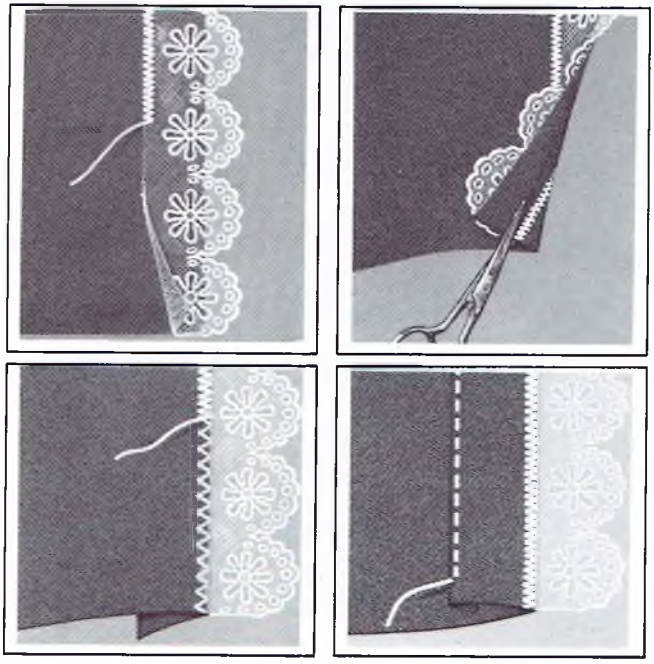
Zig-zag

Check that the needle is in the highest position. You have the choice of three zig-zag widths, 1.5, 3 and 5 mm.

Turn the stitch selector to the required zig-zag symbol. Set the stitch length regulator to the recommended stitch length, but experiment until you arrive at the best setting for the actual work you will be doing.

Zig-zag is used for sewing on lace, gathering, bound edging, appliqués, etc.

Three-step zig-zag is recommended for overcasting, as it binds better and is more attractive.



Sewing on lace

The simplest way to attach lace is to place it ½″ or so in on the fabric and sew with a fairly close zig-zag (stitch length at the buttonhole symbol and the intermediate zig-zag width).

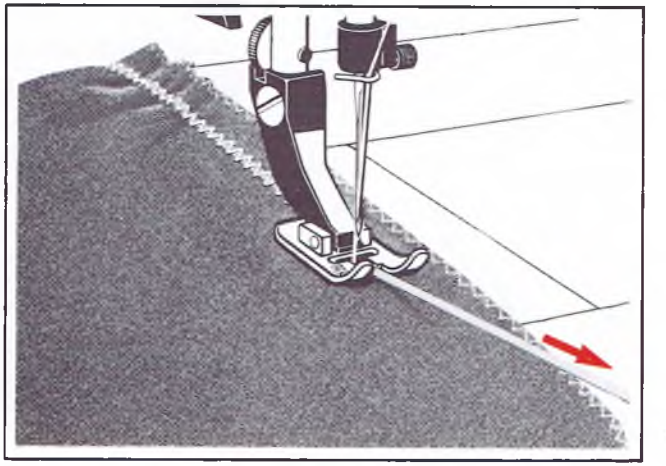
Trim from the reverse side, close to the stitching.

The lace can be more firmly attached if it is first placed about ½″ in on the fabric and sewn on with narrow, sparse zig-zag. Fold the fabric back against the reverse side and stitch again from the right side, this time using a little wider zig-zag and closer stitches.

Trim the fabric on the reverse side close to the stitching, or fold a hem and sew with straight stitching.

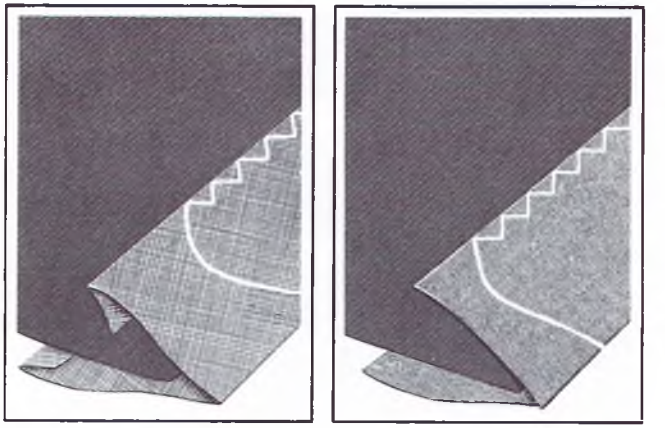
Gathering with zig-zag

Gathering by zig-zagging over elastic cording gives soft, supple gathering for smocking and elastic in blouses, children's clothes and nightwear. The elastic can be stretched while sewing or when the seam is finished. The latter method is particularly suitable when sewing several rows of gathering. If you sew and gather simultaneously, hold the elastic firmly both in front and behind the presser foot and stretch the elastic – not the fabric! The zig-zag stitch should be wide enough so that the elastic can glide within it and the gathers will be evenly spaced when the work is finished.



Bound edges

The simplest method to bind edges is to use ready-made bias binding or woven tape with selvedge. If the binding is to be sewn on to a curved edge it should be pre-shaped. Fold it over the edge of the fabric allowing the part which will be on the reverse side of the fabric to be slightly wider. Sew with narrow zig-zag stitches or the intermediate zig-zag width.

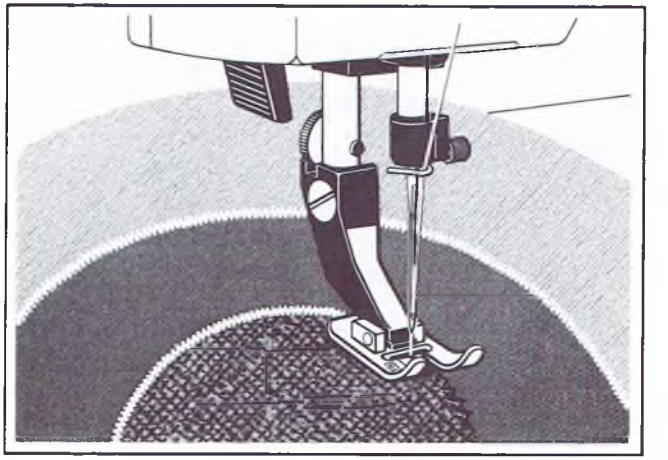


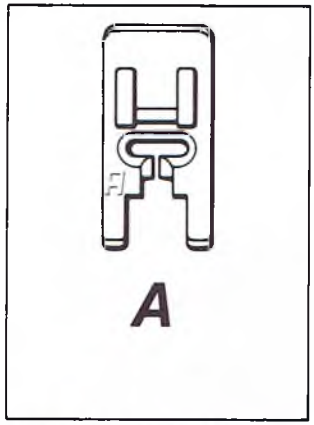
Appliqués

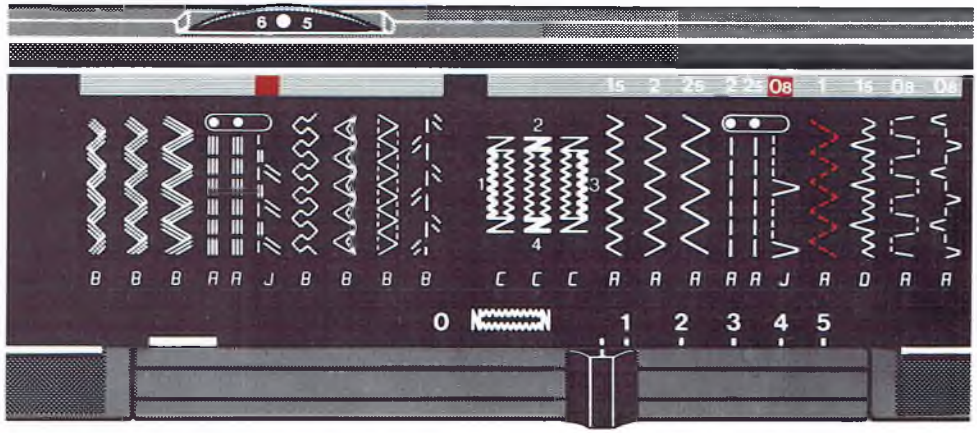
When sewing appliqués you can either cut out the figures before sewing them on, or draw the figure, sew it onto the garment around the contours and then trim, cutting close to the stitching. Secure the pieces with pins.

Use presser foot B. Sew the figures on by machine, using a long zig-zag stitch. Then stitch around the edges a second time with a closer and wider zig-zag. The stitch length should be adjusted according to the thickness of the fabric.

If you use small cording when sewing the second stitching, you will have a raised contour outline.





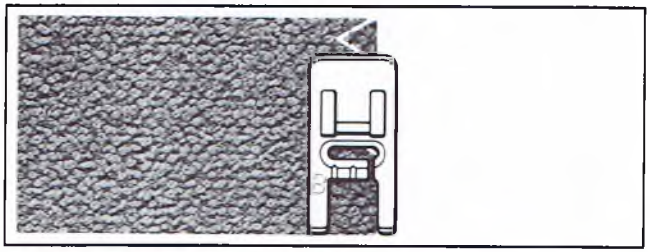


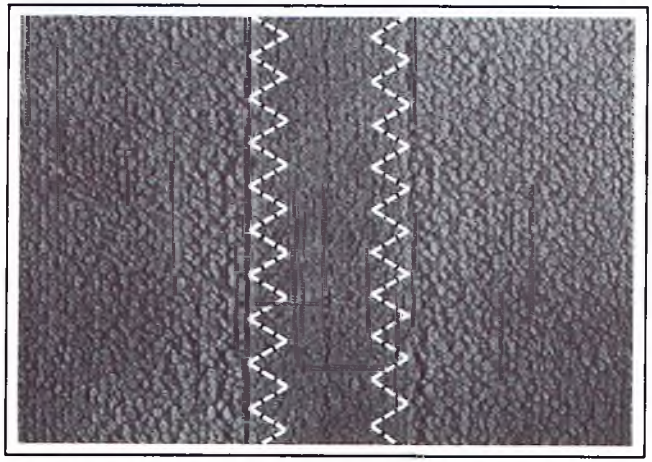
Three-step zig-zag

Check that the needle is in the highest position. Turn the stitch selector to symbol.

Set the stitch length regulator at 1 as a recommended basic setting.

Three-step zig-zag is suitable for overcasting most fabrics, especially stretch, lightweight or loosely woven fabrics. It has many advantages compared to ordinary zig-zag. It is more elastic and will not pucker the edge of the fabric. It is ideal for sewing terry cloth and is also used for darning and mending.





Overcasting

Trim the edges of the fabric before overcasting. Make sure that the needle sews over the edge of the fabric. Let the edge of the fabric follow the right marking of the presser foot. For ordinary fabrics use presser foot A. For overcasting terry cloth use presser foot B, see illustration.

Sewing terry cloth

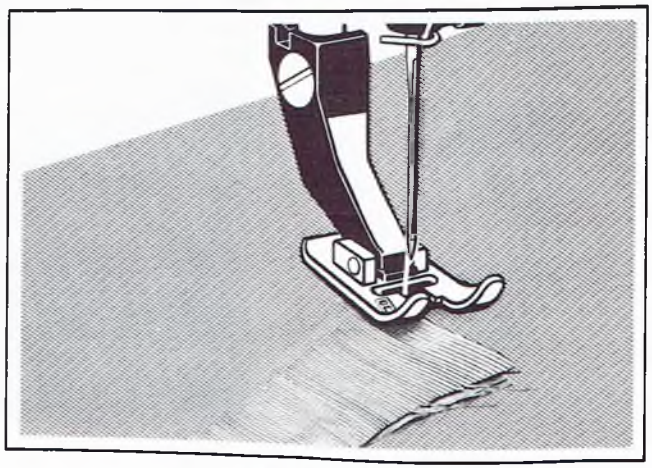
Three-step zig-zag will give a strong and attractive seam when sewing terry cloth. Use presser foot B.

Straight stitch the garment together leaving 1.5–2 cm (5/8–3/4") seam allowance. Trim the edges so that they do not fray. Press the seam allowance open and sew the edges down against the garment on the wrong side with three-step zig-zag. Even though the stitching goes right through to the "right" side of the garment, it is almost invisible. Even the wrong side looks neat.

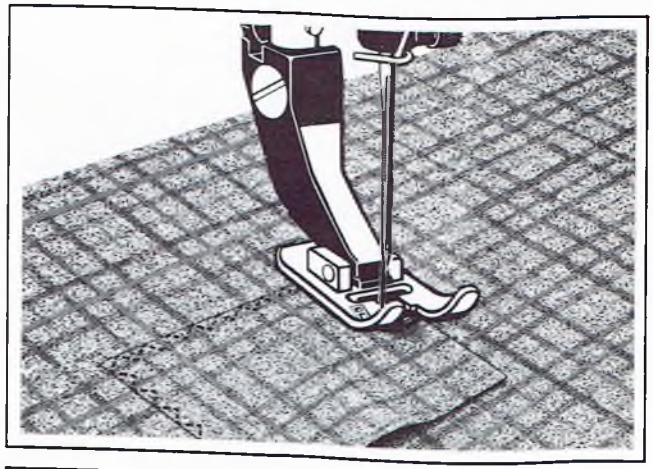
Mending

Three-step zig-zag is a versatile stitch which can be utilized for mending and darning the majority of materials. Use presser foot A. The thread should be the same color as the fabric. The setting should be adapted to the material. Stitch length 0.5–1.

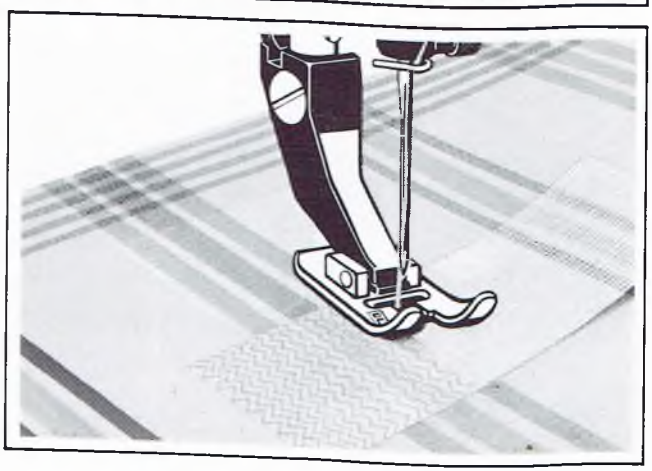
When mending a tear, place the edges of the fabric together and sew them together with three-step zig-zag. If necessary, reinforce the tear with a piece of fabric on the reverse side and sew back and forth once or twice.

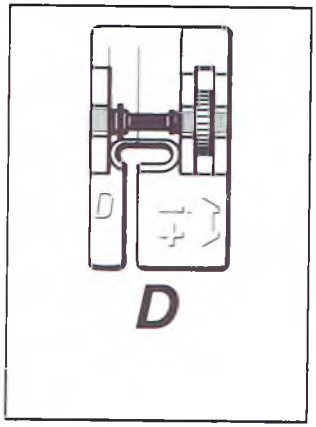


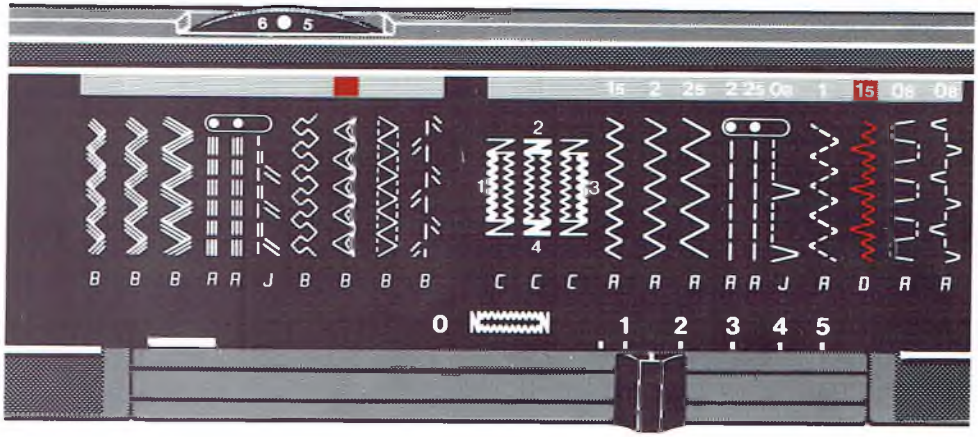
A patch is sewn on around all edges with three-step zig-zag and relatively close stitching. By sewing round the patch several times, the mend will be stronger. If you have model 190, use the lower needle stop position when turning corners.



A threadbare spot is mended by sewing back and forth with three-step zig-zag. This method is called Quick-mend and is the quickest and easiest method of darning. Use the reverse feed button. For every row of stitching, guide the fabric slightly to the side so that the stitches cover the entire worn area. If the fabric is very worn, a piece of fabric or lining may be attached to the reverse side of the material as reinforcement. Use gauze as reinforcement when mending table-cloths, napkins and towels.







Blindstitching

Blindstitching has small zig-zag stitches between the larger zig-zag stitches. It is used for hemming skirts made of woven and knitted fabrics without the stitches being visible on the right side.

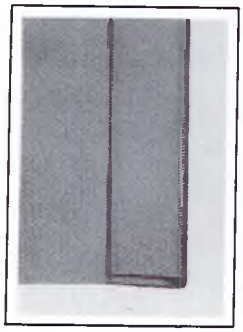
Check that the needle is in the highest position. Set the stitch selector at the symbol ⩙ .

Set the stitch length regulator at 1.5 as a recommended basic setting, but you can reduce or increase the stitch length if you wish to vary the space between the fastening stitches.

To avoid hard creasing when hemming certain fabrics, you can reduce the presser foot pressure one or two steps.

Before starting to sew, it is wise to switch to half speed if you have model 190. Test sew on a scrap of fabric and look at the right side.

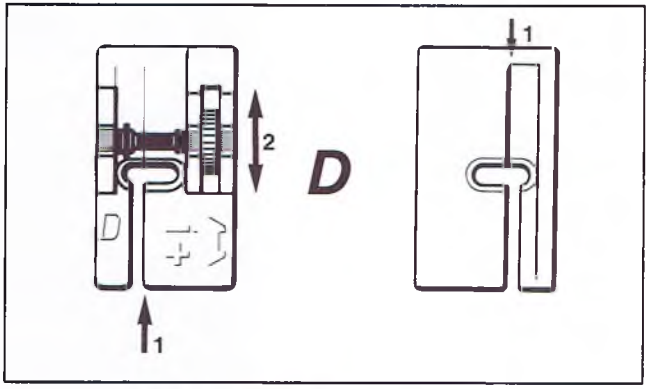
The thicker and softer the fabric, the less visible the stitches will be. When sewing lightweight woven fabrics, it is unavoidable that a small stitch will show on the right side.



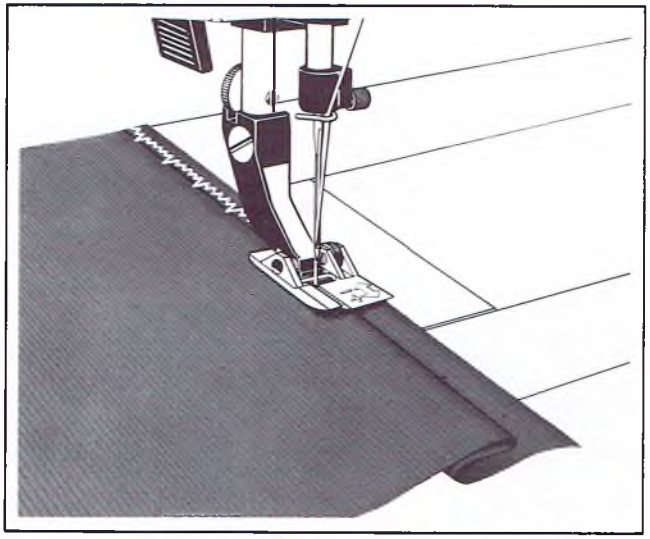
Fold the fabric as illustrated.

Snap on the presser foot D in the same way as the regular presser foot. As fabrics vary in thickness the presser foot can be shifted sideways so that the edge guide 1 underneath may be set according to the thickness of the fabric.

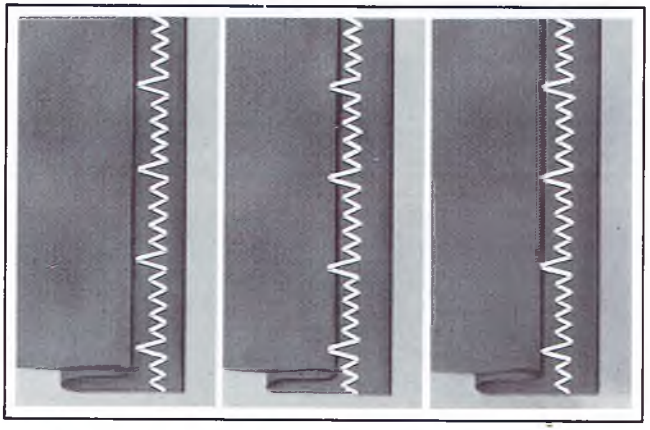
Move the presser foot by turning the red roller 2 forward + or backward −. When sewing light fabrics turn the roller toward −. When sewing thick fabrics, turn toward +. Experiment until you find a suitable setting.

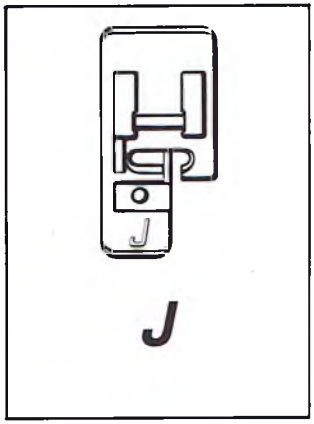


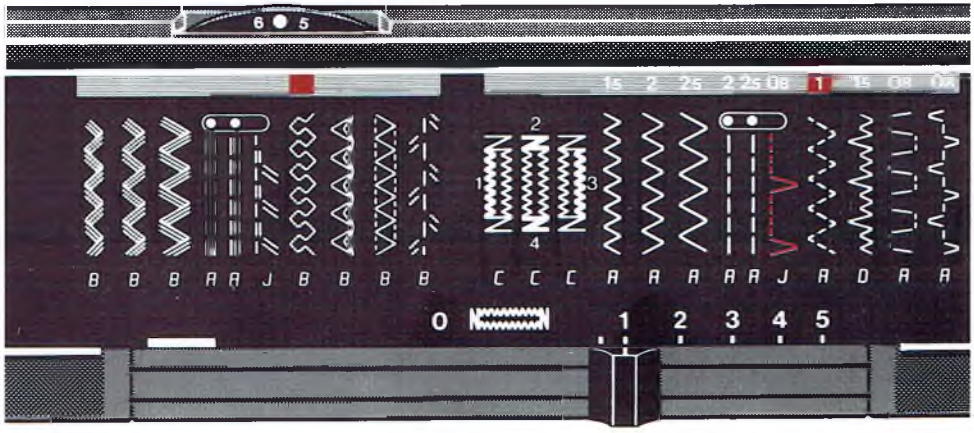
Be sure that the folded edge follows the edge guide 1 underneath the presser foot.



Sew a few stitches and compare the result with those in the illustration. The picture to the left shows how the stitches fail to reach the folded edge of the fabric. You should then check that the fabric edge exactly follows the edge of the edge guide or turn the red roller slightly toward +. The stitch is too far in on the fabric fold in the center seam in the illustration and will be visible on the right side. Turn the roller toward −. The seam to the right in the illustration shows invisible hemming. The stitching catches just one thread of the folded edge.





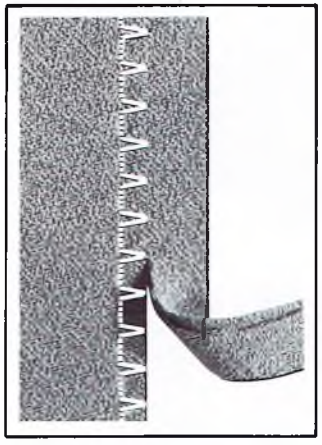


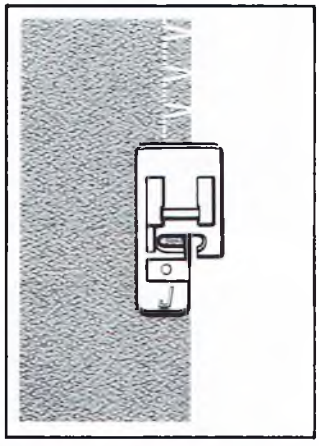
Overcast stitch

Check that the needle is in the highest position. Turn the stitch selector to the symbol V‴V‴V‴.

The standard stitch length setting is 0.8 and can be increased or reduced depending on the fabric.

The overcast stitch can be used for joining and overcasting the edges of lightweight, woven and elastic fabrics, like chambray, taffeta, nylon cire and silky-knit (jersey).

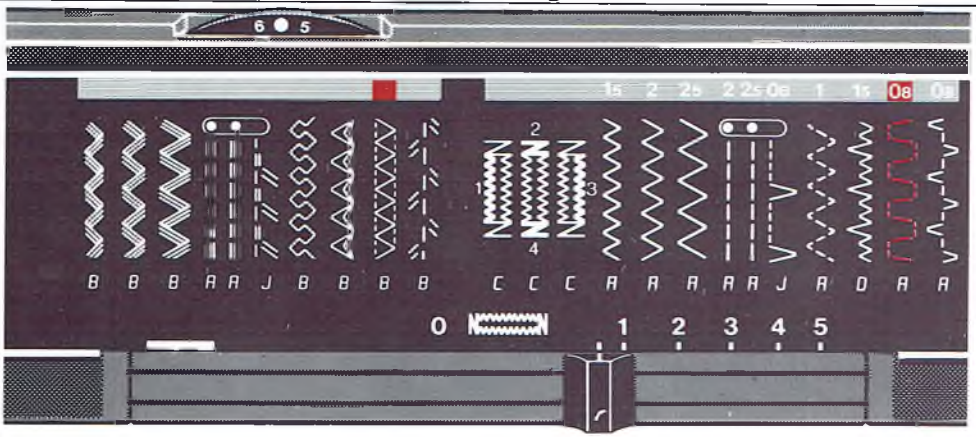


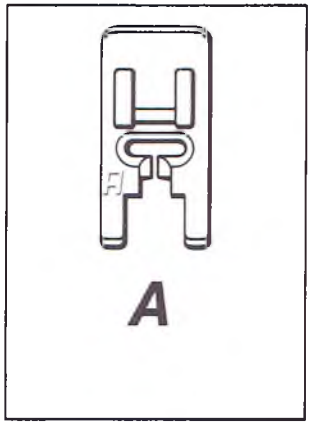


Join and overcast directly on the edge where a 5 mm (3/16″) seam is allowed, or cut out the garment with a wider seam allowance, sew with overcast stitch and then trim close to the stitching.

Use the overcast stitch to make scalloped edges on sleeves, flounces, etc. on light fabrics. Fold the edge and sew on the fold, using a tight upper thread tension. Use presser foot A.

If you sew scalloped edges on woven fabrics, it will be necessary to sew on the bias.





Double-action stitch

Check that the needle is in the highest position. Turn the stitch selector to the symbol /\/\/\/\.

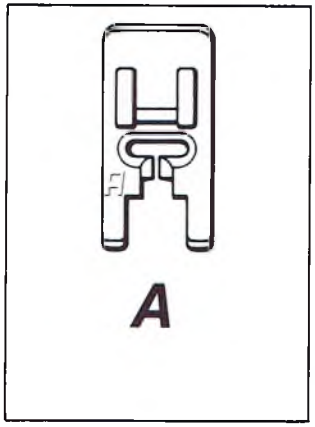
Set the stitch length regulator at 0.8 as a recommended basic setting.

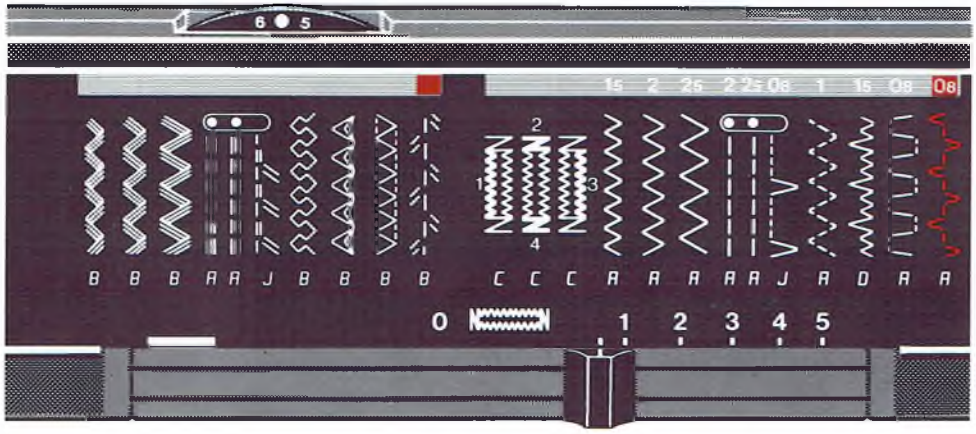
Use the double-action stitch for hemming and sewing overlapped seams in tricot and soft material and also for gathering with narrow, flat elastic or elastic cord.

Overlapped seams will be flexible and are excellent for baby clothes. They are also recommended for sewing leather. Lap one piece of fabric over the seam allowance of the other piece. Sew along the open edge on the right side. Turn the work and sew along the open edge on the wrong side.

Patchwork will be very attractive if sewn with the double-action stitch. Place the patches overlapping each other 5 mm (3⁄16″) and sew with double-action stitching.

When gathering with narrow, flat elastic or elastic cord, be sure the elastic does not get stitched in by mistake but can run freely under the stitching. Use presser foot B.



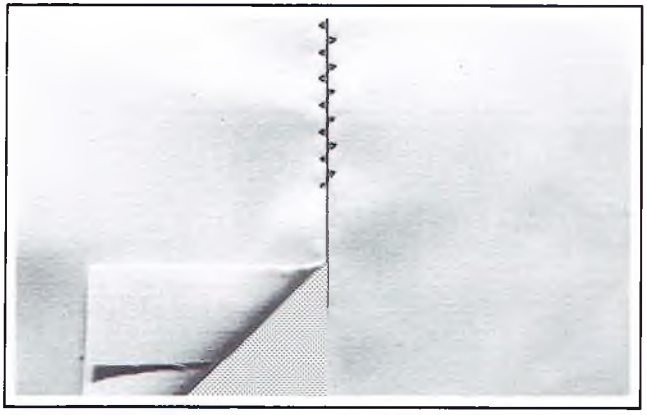


Bridging stitch

Check that the needle is in the higest position. Turn the stitch selector to the symbol -^-v-^-v-^ .

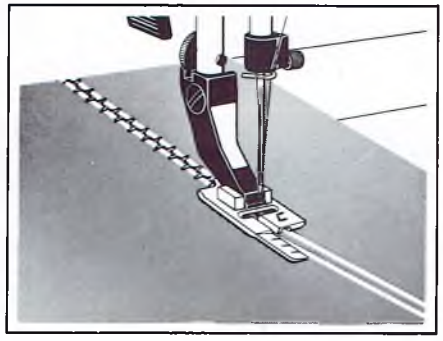
The standard stitch length setting is 0.8 mm and may be varied between 0.5 and 2 mm.

Use the bridging stitch for joining two pieces of fabric with folded edges.

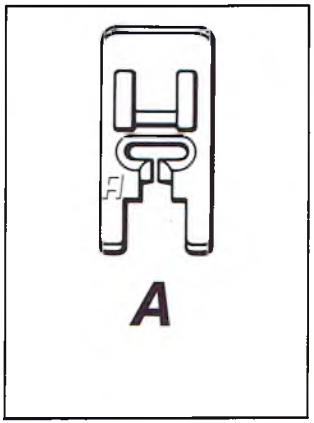


If you would like a decorative seam, place the folded edges (without sewing them together first) a few millimeters from each other and join with bridging stitch.

It may also be used for inserting lace and embroidery. As it is elastic, it is suitable for sewing and mending underwear and swimsuits made of lycra.



The bridging stitch is also useful for gathering with shirring elastic. Use the buttonhole foot C and place the shirring elastic around its "heel". Remember that the elastic will always be stitched double, so take this into account when calculating how much you will need. Sew bridging stitch over both lengths of the elastic simultaneously. The elastic may either be stretched while sewing or when you have finished the seam. In the latter case it is important that the elastic does not get stitched in by mistake but can run freely under the stitching.



Reinforced straight stitch

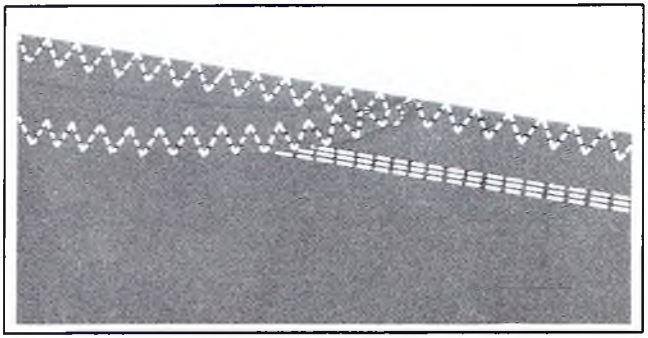
Check that the needle is in the highest position. Turn the stitch selector to the symbol ≡≡≡≡≡≡≡ and shift the stitch regulator to the red area on the left.

The seam may also be sewn in the left needle position.

The reinforced straight seam can be used for joining seams in stretch fabrics and for topstitching.

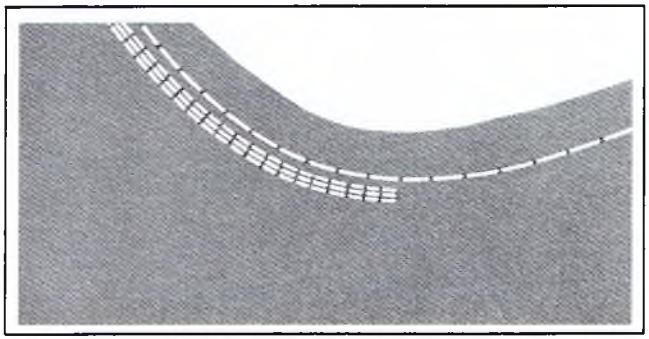
Reinforced straight stitching is stronger than ordinary straight stitching, due to the fact that it is a triple stitch and is elastic.

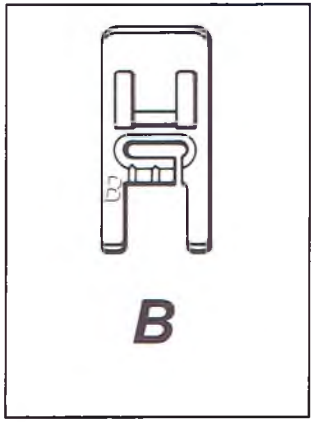
When sewing stretch fabric with seams to be pressed open, use reinforced straight stitching instead of ordinary straight stitching. Overcasting can be done with the three-step zig-zag.



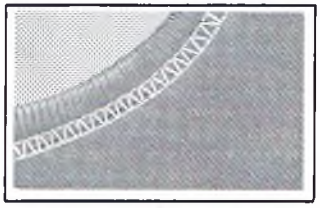
Reinforced straight stitching is also preferable for sleeve insertion and for crotch seams which are subject to considerable strain, even in non-stretch fabrics.

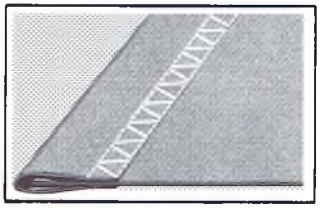
A tip: baste the seams using ordinary straight stitching, stitch length 4–5, and thread the same color as the fabric. When you have tried on the garment, the seams can be "sewn in" with elastic straight stitching. The basting thread need not be removed if you sew exactly along the basting seam.





Flatlock is used for sewing overlapping seams, decorative hems, binding and edges on woven and elastic fabrics.





Flatlock

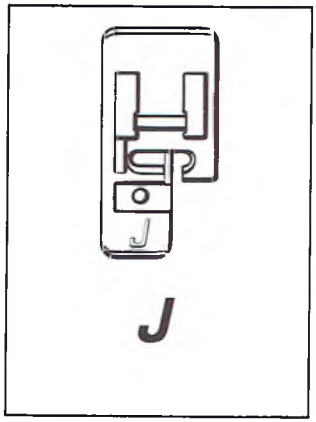
Check that the needle is in the highest position. Turn the stitch selector to the symbol ⩘⩘⩘⩘⩘⩘ and shift the stitch regulator to the red area on the left.

To sew an overlapping seam, lap one piece of fabric 1 cm (3/8") over the other piece and sew with the flatlock stitch over the fabric edge on the right side. Trim on the wrong side or sew another seam from the right side.

You can produce a decorative hem by folding a single hem on the wrong side and sewing the flatlock from the right side.

Fasten binding by folding the binding over the edge of the fabric, slightly wider on the wrong side. Sew over the edge of the binding on the right side with the flatlock and trim excess material. Use knit trim or bias binding when binding curved edges, like round necks and armholes.

Use the flatlock to sew narrow belts, bands, etc. Fold the fabric in three and sew in the center. Trim excess material from underneath.

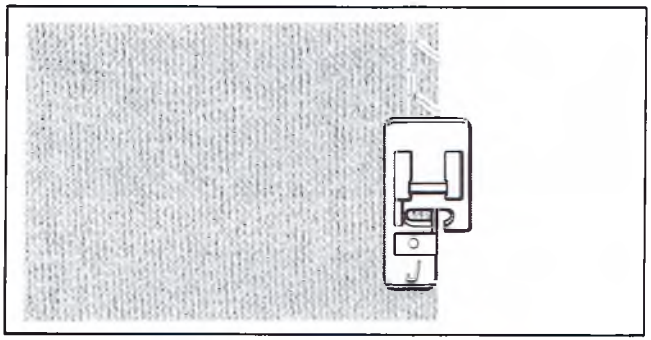


Overlock

Check that the needle is in the highest position. Turn the stitch selector to the symbol and shift the stitch length regulator to the red area on the left.

The overlock is used for joining many fabrics but is particularly suitable for producing narrow, supple stretch seams in double-knit, ribbing, stretch terry cloth and other knitted fabrics.

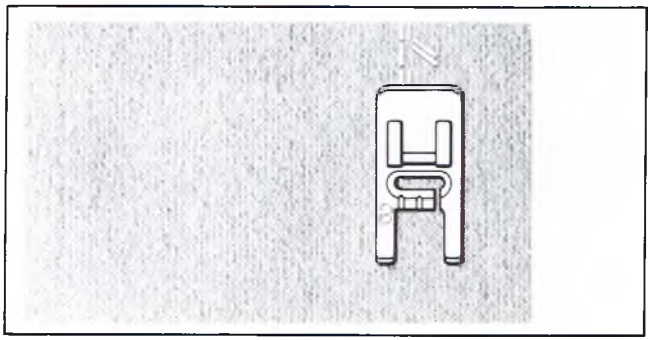
With the overlock stitch you join and overcast simultaneously. Use 5 mm (3/16") seam allowance. When sewing heavy knits, reduce the presser foot pressure slightly.

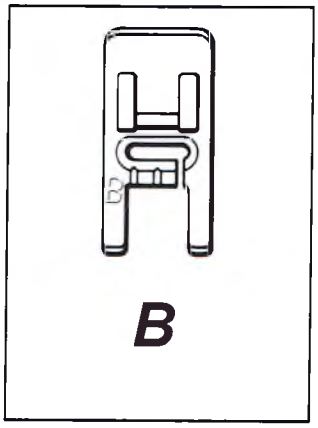


If you prefer, you can also cut the garment with a wider seam allowance, but remember that the left edge of the seam should then follow the marking for the seam.

You can also use presser foot B as shown in the illustration. The left marking of the presser foot can be used as a guide.

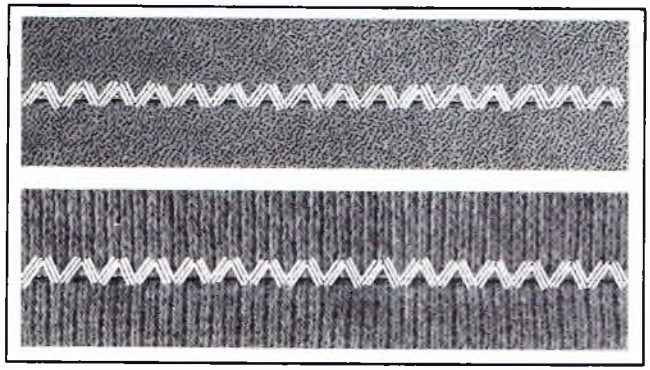
Trim the remaining seam allowance after you have finished the seam.



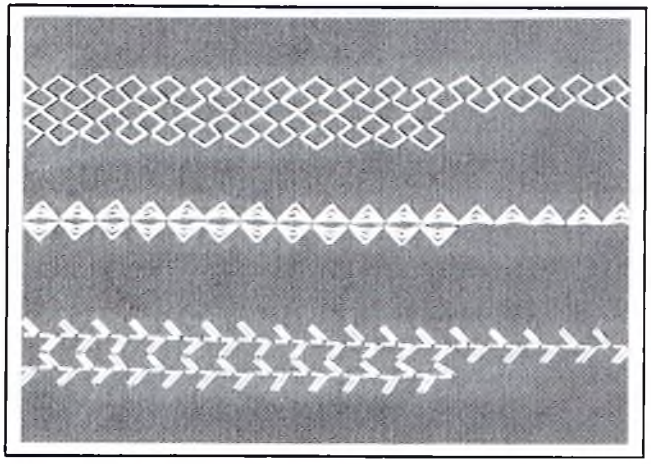


Ric-Rac is used for pronounced topstitching, overlapped seams and appliqués in leather.

You have the choice of three different widths.



Overlapped seam on leather.



Topstitching.

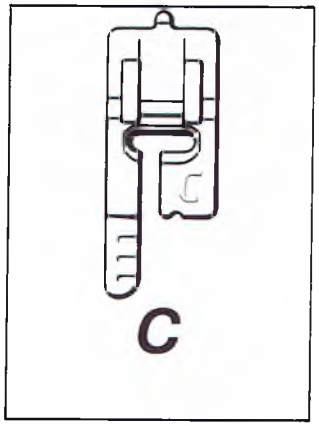
Reinforced zig-zag (Ric-Rac)

Check that the needle is in the highest position. Turn the stitch selector to the symbol and shift the stitch regulator to the red area on the left.

Decorative stitches

Turn the thread tension dial to the buttonhole symbol. Remember to sew 1/8" in from the fabric edge. The best results will be obtained with embroidery thread. Always test sew a decorative stitch on a scrap of the fabric which you will be using.

Light and tightly-woven fabrics will pucker easily when you sew a decorative stitch. You can overcome this problem by using a layer of lining or interfacing.



Buttonholes

When sewing buttonholes, change to the buttonhole foot C.

The buttonhole foot has graduated markings to help you make the buttonholes the same length. Decrease the upper thread tension by turning the thread tension dial to the buttonhole symbol.

Set the stitch selector and stitch length regulator at the buttonhole symbol. Before doing so, make sure that the needle is in the highest position. Engage the upper needle stop position if you have model 190. The finer thread you use, the more attractive and even the buttonhole will be. Make a mark on the fabric where you wish to begin the buttonhole.

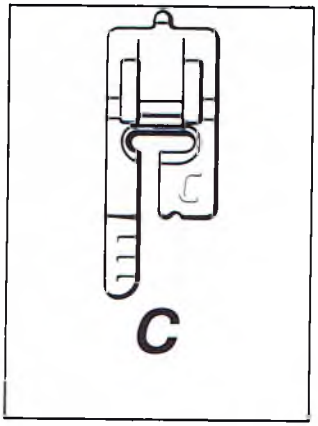
Always test sew a buttonhole and adjust the stitch setting. Insert the fabric under the presser foot, remembering that the machine will begin to sew in reverse.

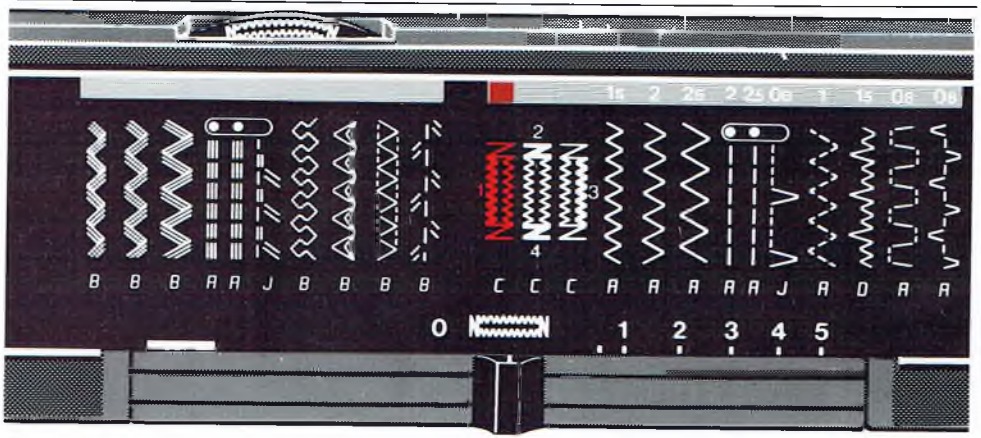
Set the stitch selector to symbol 1.
The machine sews the first column in reverse. Stop when you reach the correct column length.

Turn to symbol 3.
Sew the other column the same length as the first one.

Turn to symbol 2–4.
Now the machine will form the bar tack. Sew three or four stitches.

Turn back to symbol 2–4. The machine will form the final bar tack. Sew three or four stitches. Turn to symbol 1 and lock the threads with a few stitches in the first column.





Reinforced buttonholes

Heavy garments and those subject to hard wear may require reinforced buttonholes, which you can sew as follows:

Set the stitch selector to symbol 1 and sew the first column in the same way as for an ordinary buttonhole, but increase the stitch length slightly. When the column is sufficiently long, stop the machine.

Turn to symbol 3. Sew the next column without a bar tack and stop the machine when the columns are equally long.

Return to symbol 1. Sew the first column once more. Stop when the correct length is reached.

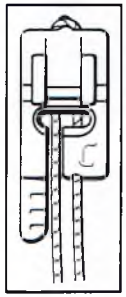
Turn to symbol 2–4. Sew the bar tack with three or four stitches.

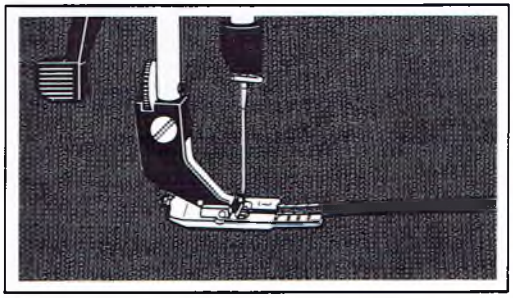
Turn to symbol 3.
Sew the second column once more.

Return to symbol 2–4. Sew the bar tack with three or four stitches. Turn to symbol 1 and fasten off by sewing a few stitches in the first column.

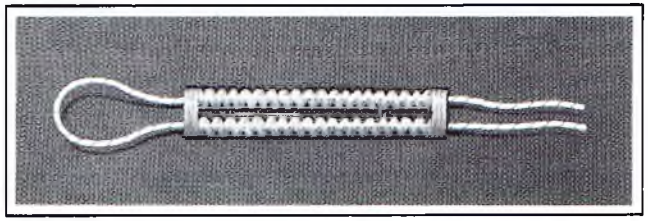
Corded buttonholes

A small cord can be used to sew buttonholes in elastic material, in order to keep the shape better. Attach the cord around the projection at the heel of the buttonhole foot as shown in the illustration. Draw the threads toward you, one under each groove in the presser foot. Lower the foot and sew the buttonhole in the normal way. Note: Do not hold the threads.



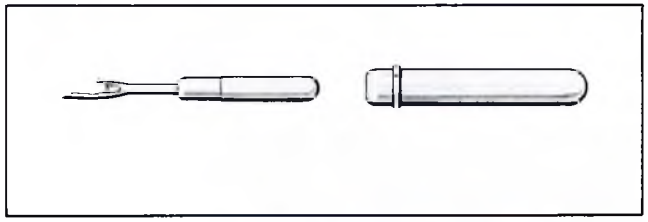


When the buttonhole is finished, pull the cord to eliminate the loop which will act as a reinforcement at one end (the end which is most worn by the button) of the buttonhole. Bar tack and cut the cord close to the stitching or use a needle and hand sew the loose ends through to the reverse side and tie them.



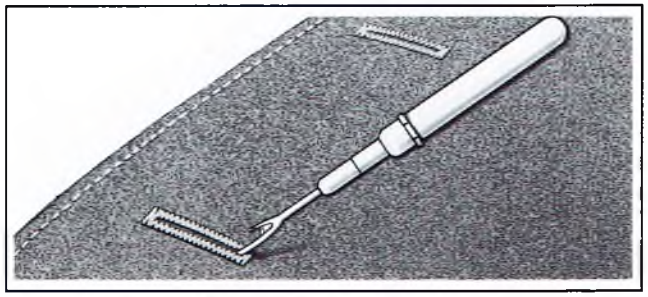
Cutting the buttonhole

The buttonhole knife which you will find in the accessory box, is equipped with a safety cap which, when taken off, can be pushed onto the back of the knife, providing a good handle.

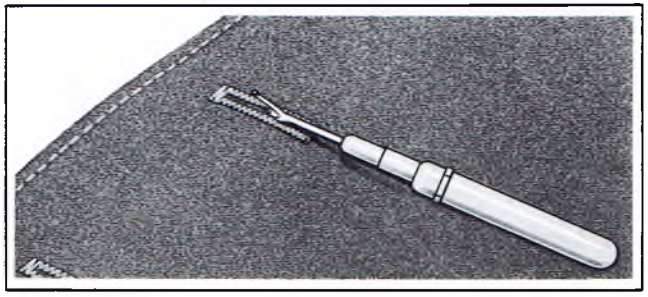


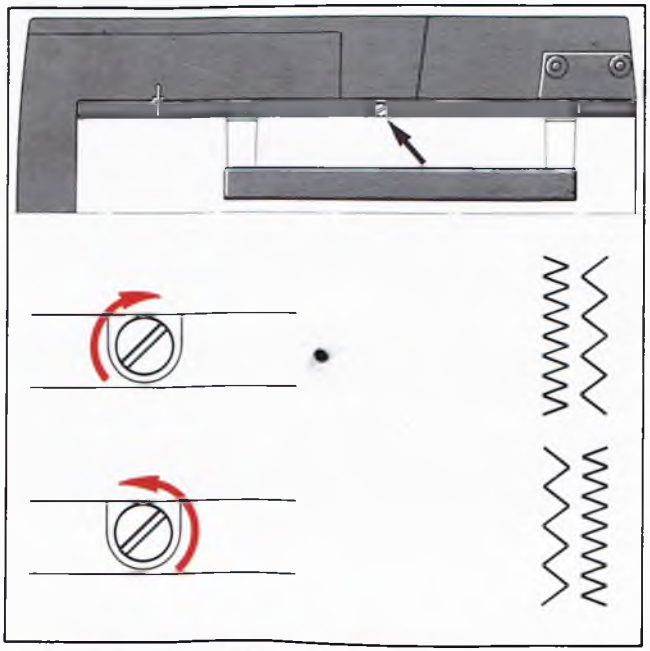
When you have finished sewing all the buttonholes, they must be cut open as follows:

Pierce the fabric at a right angle until the curved blade edge reaches down to the buttonhole.



With the knife more or less parallel to the fabric, push forward, taking care not to cut the columns of the buttonhole. The small red bead serves as a guide. Cut the buttonhole to the middle and then repeat the cut from the other direction.



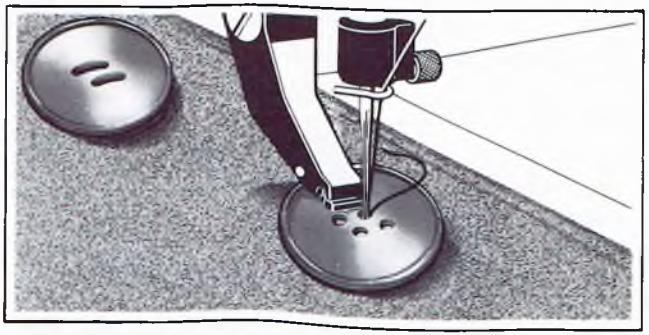


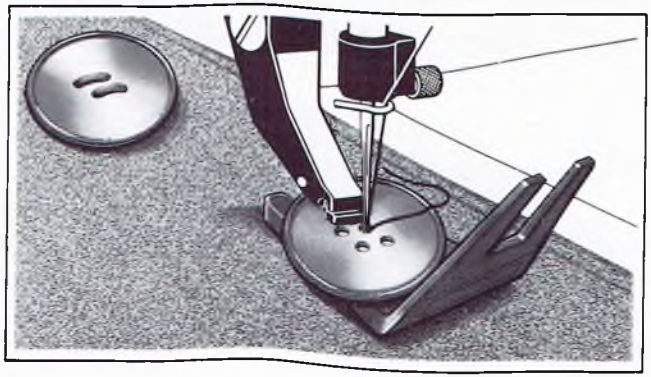
Precision setting for buttonholing

The machine is set for sewing even and attractive buttonholes in most commonly used fabrics. However, some combinations of fabric, needle and thread may cause some variations in the columns. If this is the case, adjustment can be made by means of a screw located on the top of the machine, under the handle.

If the left column is tighter than the right one, tighten the screw slightly and try once more.

If the right column is tighter than the left one, loosen the screw slightly.





Sewing on buttons

Lower the feed dog. Remove the presser foot, put the button in place and lower the presser bar. As most buttons have 3–4 mm space between the holes, set the stitch selector at the widest or intermediate zig-zag. Turn the handwheel toward you and test carefully that the needle enters the first hole and then the other hole. Depress the foot control gently without moving the button. Hold both thread ends behind the clamp and sew five or six stitches. Move to the other holes and repeat. Set the needle to straight stitch in the left needle position and fasten the threads.

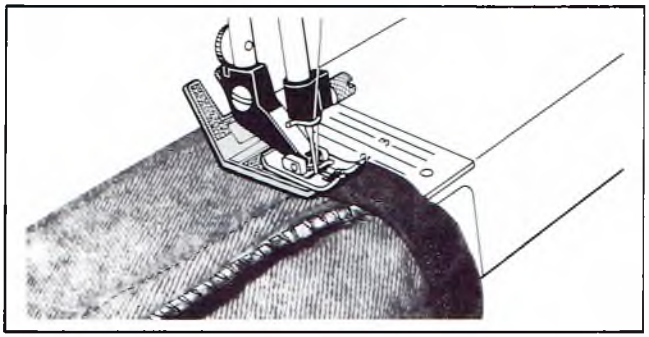
When sewing buttons on garments, a shank is often required so that the button stands slightly away from the fabric. Use the button reed for this purpose. Use the thin end when sewing buttons on light fabrics, the thick end for heavier fabrics. Fix the button with a stitch. Raise the presser foot and place the button reed between the button and the fabric. Lower the presser bar and sew on the button.

Remove the button reed, pull the threads between the button and the fabric, wind them a few times around the shank and tie the ends.

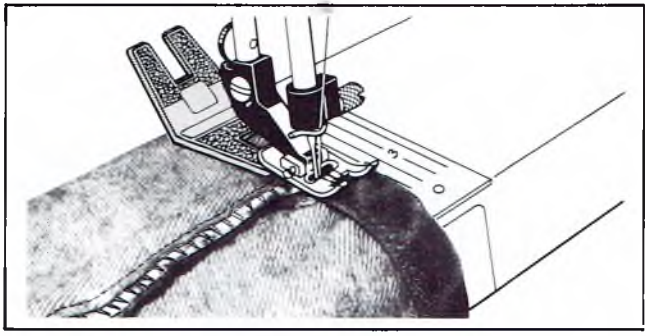
Clearance plate

The clearance plate is also an excellent aid when sewing hems over extremely thick seams, e.g. on jeans.

Start sewing the hem with straight stitch. When you have sewn so far that the presser foot is touching the seam, stopp the machine with the needle in the fabric. Lift the presser foot and insert the clearance plate from behind.

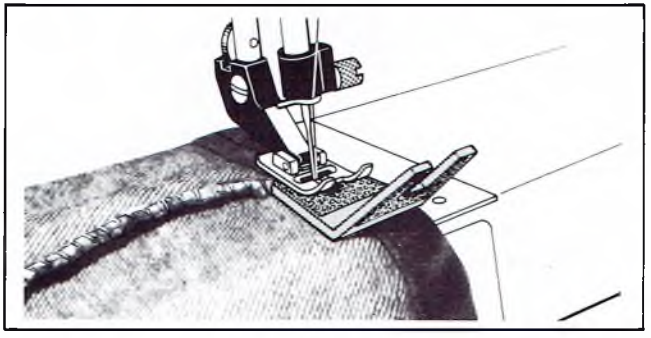


One side of the clearance plate is elevated. Use the side which corresponds best to the thickness of the seam. Lower the presser foot and continue to sew over the thick seam.

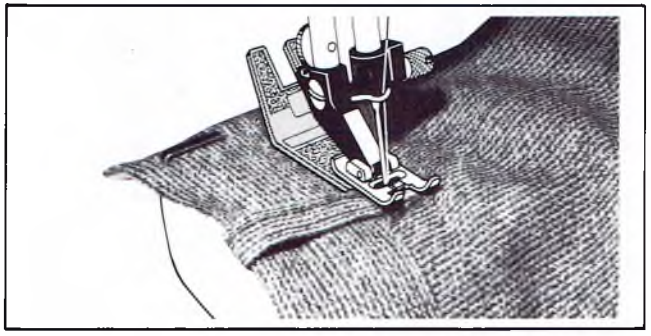


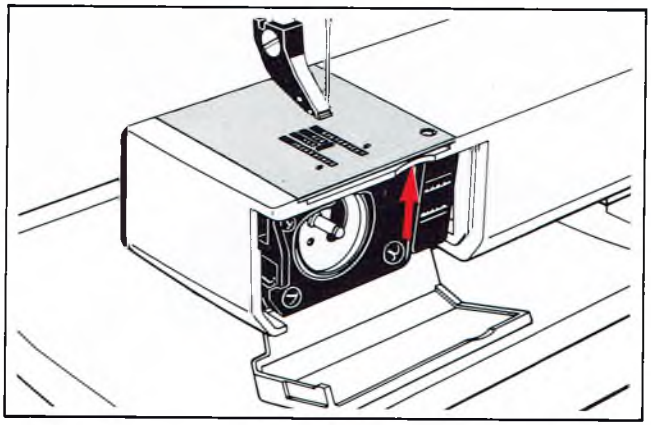
Stop the machine again just in front of the seam with the needle in the fabric. Remove the clearance plate and re-insert it under the presser foot from the front.

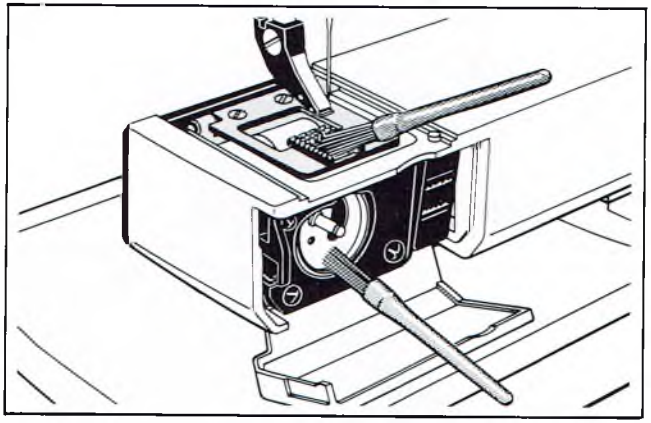
Sew a few stitches further until the whole foot has passed the seam and is resting on the clearance plate. Stop the machine once again with the needle in the fabric., lift the presser foot and remove the plate. Continue sewing until you reach the next thick seam and repeat the foregoing procedure.

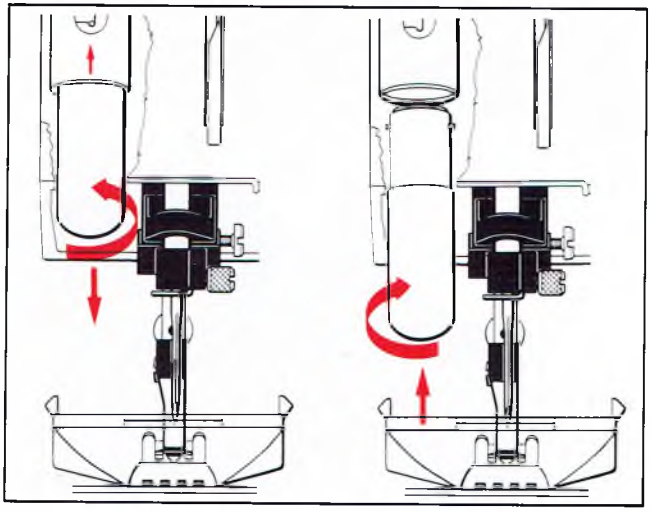


This illustration shows an additional way in which the clearance plate can be used to simplify sewing extremely thick fabrics. No more skippped stitches or broken needles in the future caused by thick seams.









Care of the machine

To keep your sewing machine operating satisfactorily it requires, like other precision machines, regular cleaning. It need not, however, be lubricated. The stitch plate should occasionally be removed. Remove the presser foot and lower the feed dog. There is a recess in the free arm to the right above the hook cover. Push the stitch plate straight up approx. 1 mm and backward at the same time until it loosens. Clean between the teeth of the feed dog with the brush you will find in the accessory box.

Whenever necessary the bobbin case and hook should also be brushed clean. Sizing or finishing compounds from the fabric may adhere to the spindle of the hook. If this has happened, the spindle should also be cleaned with the brush. Remove any pieces of thread which may have become wound round the spindle.

When replacing the stitch plate, insert it from behind into the recess in the arm. Ease the front edge up onto the small pin and continue to push it forward until it snaps into place.

Belts

Belt adjustment is not required.

Changing the light bulb

The lamp is located to the left of the needle. First remove the lamp guard. By inserting the small screwdriver in the recess at the left edge and applying slight downward leverage, you can slide the guard down to the stitch plate, as illustrated below.

To remove, press the light bulb upward, turn a quarter turn in the direction of the arrow. To insert the new light bulb, push it upward and turn it a quarter turn in the direction of the arrow.

Use a light bulb of maximum 15 W, as indicated on the rear of the machine.

Why haven't I got the results I expected?

Very seldom does anything go wrong with this sewing machine. It is well constructed and can withstand very intensive use. Yes, generally it performs better the more it is used. However, below you will find some advice if, in spite of everything, you are not satisfied with your sewing results.

Always start by checking the needle

An important part which needs to be changed from time to time is the needle. Always start with a new needle as soon as you discover that a seam is not what you expected. Test sew on a scrap of the fabric you are sewing. Read about needles on page 17.

Check that you have chosen the correct needle and see that it is correctly inserted.

Unattractive stitches

The thread tension is not correct. See page 14.

The machine may be incorrectly threaded. The correct threading is shown on page 12.

The needle, thread and fabric do not correspond. See page 17.

Wrong upper thread. It should be of the same thickness as the lower thread.

Bobbin wrongly inserted in the bobbin case. See page 12.

The needle breaks

You may have helped the machine to feed by pulling the fabric. The needle can easily strike against the needle plate and break.

The upper thread breaks

Check the thread spool to see that it has not caught in any way.

The needle eye may have sharp edges which cut the thread. If so, change the needle. See page 17.

The upper thread is incorrectly threaded. See page 12.

The upper thread may have too much tension. Refer to thread tension, page 14.

The thread is knotted.

The thread and needle do not correspond. See page 17.

The hole in the needle plate may be chipped and have sharp edges. Slight damage to the needle plate can possibly be polished or filed but we recommend that you replace it. See page 42.

Lower thread breaks

The bobbin case is incorrectly inserted. See page 12.

The lower thread may be incorrectly threaded. See page 12.

The needle plate hole is damaged. Slight damage to the needle plate can possibly be polished or filed but we recommend that you replace it. See page 42.

Why havent't I got the results I expected? (cont.)

Uneven thread tension
This may be due to poor quality thread.

Irregular bobbin winding
The bobbin is not placed correctly. See page 11.
The machine is not correctly threaded for bobbin winding. See page 11.

The fabric puckers
The upper thread tension is too tight. See pages 13–14 for correct thread tension.

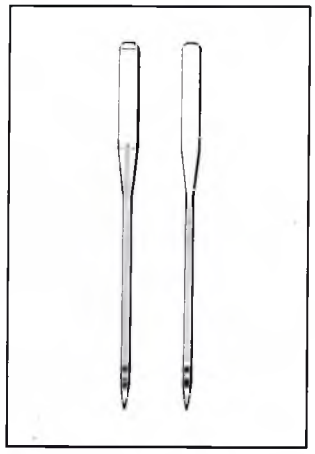
The machine does not feed the fabric
The stitch length is too short. Shift the stitch length regulator to a higher number.
The feed dog may be lowered. Raise it by pressing the lower part of the feed dog button. See page 11.
The presser foot pressure is disengaged. See page 10.
The feed dog is full of dust and dirt. Clean with the brush. See page 42.

The seam is too loose — fabric layers not held together
The thread tension is far too loose. Pages 13–14 show how to adjust the thread tension.

Machine runs sluggishly
Dirt or lint has fastened under the needle plate. Loosen the needle plate and brush clean between the teeth of the feed dog. See page 42.
Dirt or lint has fastened in the hook. Remove the bobbin case and clean with the brush. See page 42.

Expert assistance
If you have followed the preceding points and still do not get satisfactory results, you should contact the dealer where you bought the machine.
The dealer will always be more than willing to give you advice and help as to what measures should be taken.
When the machine is being checked, it is a great help if it can be test sewn under as similar conditions as possible as when you used it.
Remember to take a sewing sample along with you, preferably on the fabric and with the thread you intend to use.
A sewing sample will often give much better information than words.

Only use needles of System 130/705 H.



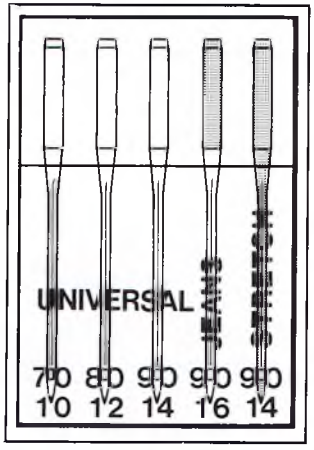
Standard needles

Needle case	Pin-pac		Needle case	Pin-pac	
401 60 86-01	411 31 00-01	5×No. 60	401 60 96-01	411 31 06-01	5×No. 90
401 60 89-01	411 31 02-01	5×No. 70	401 60 97-01	411 31 07-01	10×No. 90
401 60 92-01	411 31 04-01	5×No. 80	401 60 98-01		100×No. 90
401 60 93-01	411 31 05-01	10×No. 80	401 60 99-01	411 31 08-01	5×No. 100
401 60 94-01		100×No. 80	401 61 02-01	411 31 10-01	5×No. 110

Jeans needles

411 62 85-01	411 31 30-01	2×No. 90, 2×No. 100, 1×No. 110
411 62 85-02	411 31 29-01	5×No. 90
411 46 69-01	412 03 55-01	5×No. 100

Needles with rounded tip			Stretch needles		
411 47 03-02	412 03 56-01	5×No. 70	411 46 68-01	411 31 23-01	5×No. 75
411 47 03-03	412 03 57-01	5×No. 80	411 62 84-01	411 31 24-01	5×No. 90



411 64 14-01 1×No. 70, 2×No. 80, 1×No. 90, twin needle, 2 mm: 1×No. 80, stretch needles: 1×No. 75, 1×No. 90, jeans needles: 1×No. 90, 1×No. 100.

411 78 90-01 1×No. 70, 1×No. 80, 1×No. 90, stretch needle 1×No. 90, jeans needle 1×No. 90.

411 45 18-01 2×No. 70, 6×No. 80, 2×No. 90.

Twin needles—limited stitch width

412 03 65-01	412 03 66-01	1,6 mm, 2×No. 70
411 42 35-04	412 03 58-01	1,6 mm, 2×No. 80
411 42 35-01	411 31 33-01	2 mm, 2×No. 80

Only for small and medium zigzag stitching.

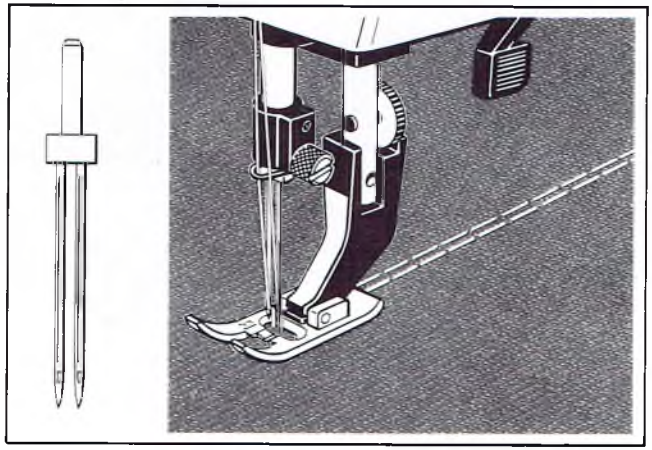
412 03 69-01	412 03 70-01	2,5 mm, 2×No. 80
412 03 59-01	412 03 60-01	4 mm, 2×No. 80
411 42 35-03	411 31 35-01	4 mm, 2×No. 90

Only for small zigzag stitching.
For parallel seams and raised seams.

Double stretch needle

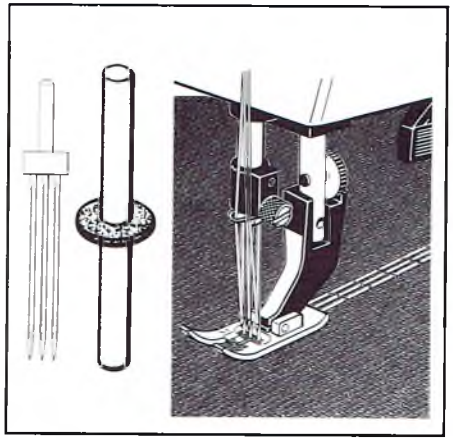
412 03 61-01	412 03 62-01	4 mm, 2×No. 75

Only for small zigzag stitching.

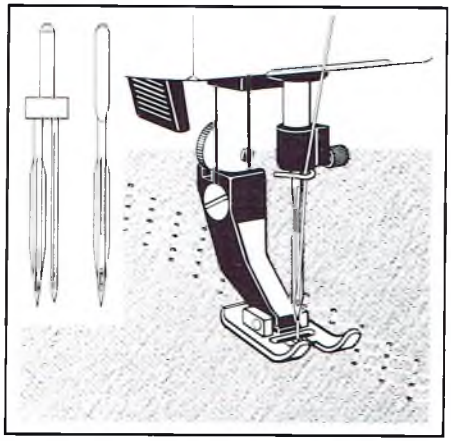


The above-mentioned needles are suitable for our sewing machines. However, all types are not available on all markets.

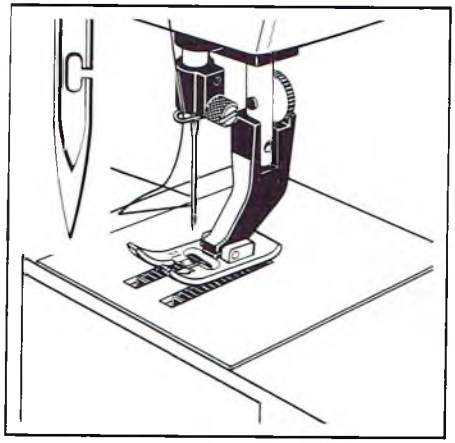
Read more about needles on page 17 and the next page.



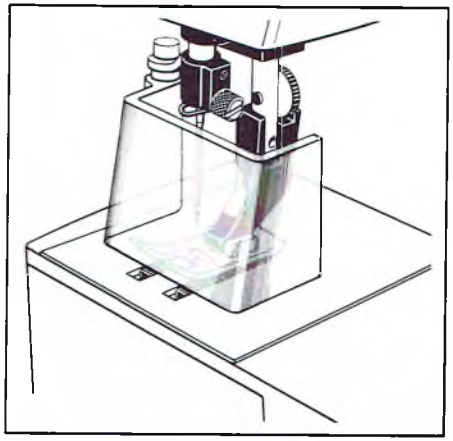
411 16 22-02. Triple needle No. 80. For straight stitching and small zigzag stitching.
401 56 00-01. Thread spool pin. To be used when necessary for a third thread spool.



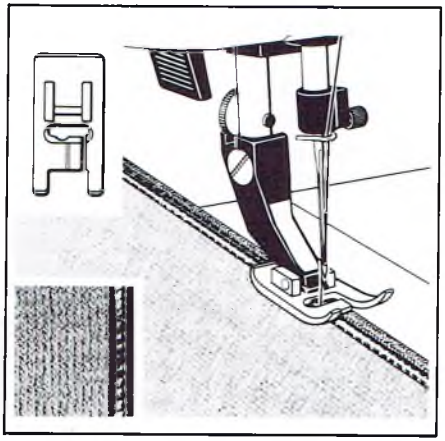
411 26 84-01. Wing needle produces a hemstitch effect. For straight stitching, small and medium zigzag stitching.
412 03 64-01. Double wing needle. For straight stitching and small zigzag stitching.



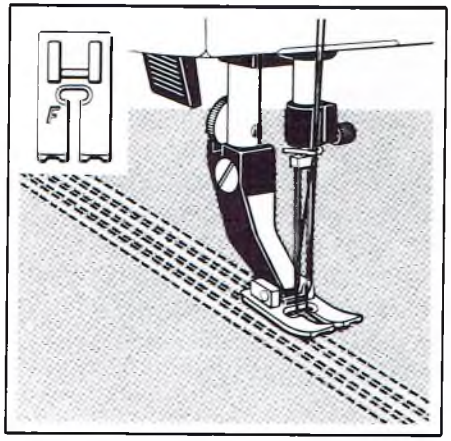
411 26 85-01/02/03. Slotted needles Nos 80, 90 and 100, for people with impaired vision. When threading, pass the thread along the needle, until it glides into the slot.



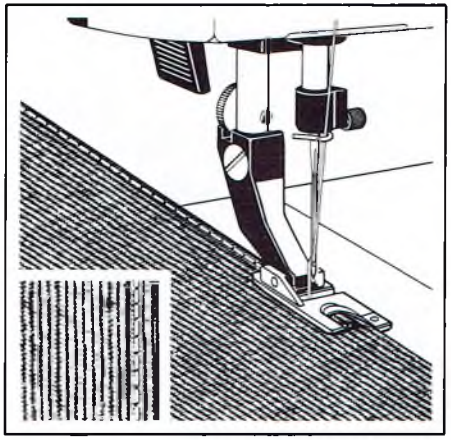
411 85 85-01. Finger guard, effectively protects your fingers while sewing.



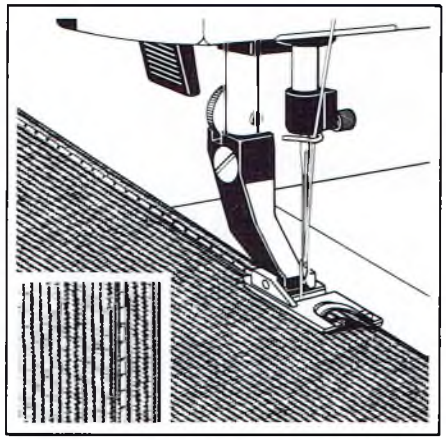
411 85 10-01. Piping presser foot for fastening tape with a flat and round part (piping). Only the round part will be visible when the tape is in place.



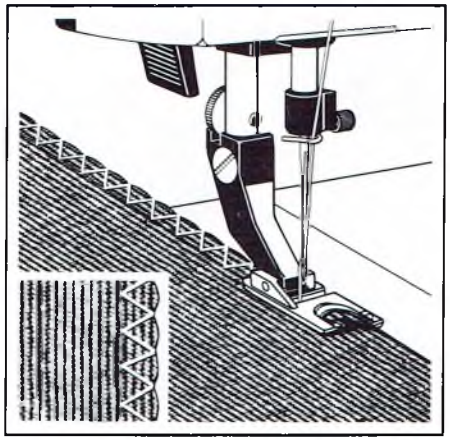
411 73 99-01. Raised seam presser foot for parallel raised seams with the twin needle. Use straight stitching or reinforced straight stitching.
411 39 25-01. Raised seam cord guide for use with or without cord.



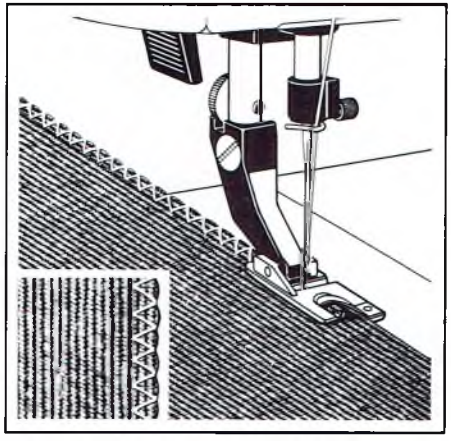
411 85 22-01. Presser foot for 2 mm hemming. For straight stitching or small zig-zag stitching, stitch length 1.5.



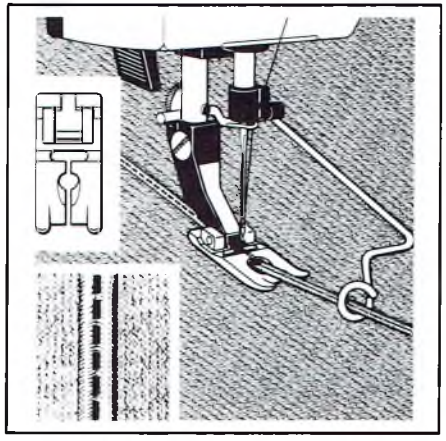
411 85 17-01. Presser foot for 5 mm hemming. For straight stitch, zig-zag or decorative stitching.



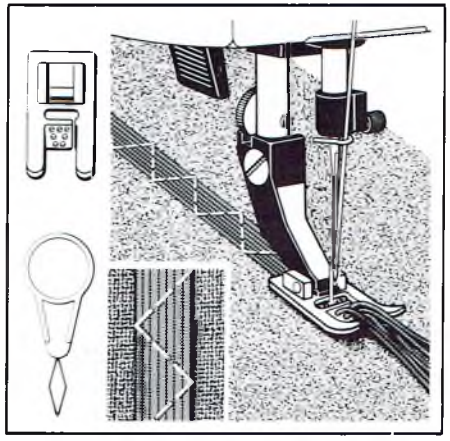
411 85 20-01. Presser foot for 3 mm scalloped hem. For medium zig-zag stitching, stitch length 4.5 and tight thread tension. Suitable for soft fabrics.



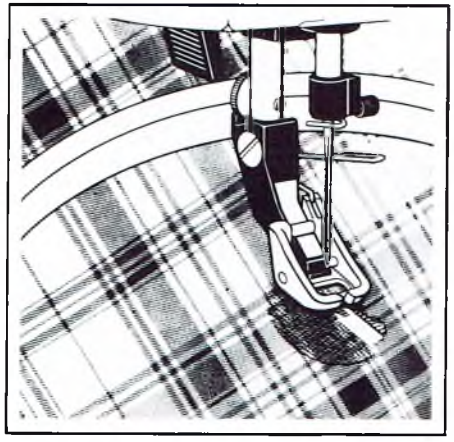
411 85 24-01. Presser foot for 2 mm rolled hem. For medium zig-zag stitching, stitch length 3. Suitable for light fabrics.



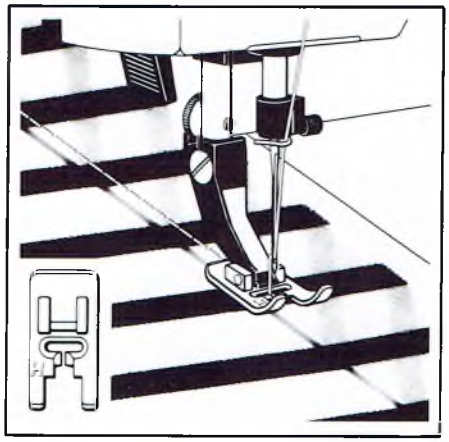
411 85 00-01. Presser foot for attaching braiding, which is inserted through a guide and attached with a straight stitch in the middle of the braiding.
411 85 01-01. Tape guide, facilitates guiding tape, cord, etc.



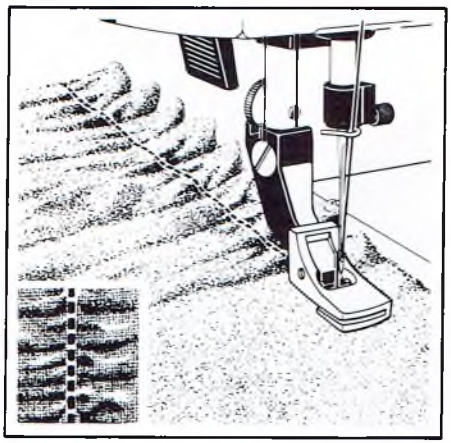
411 85 11-01. Presser foot with seven holes for decorative stitching over yarn or for satin-stitching with wide zig-zag.
411 62 87-01. Thread the needle threader from underneath the presser foot and draw the threads down through the holes.



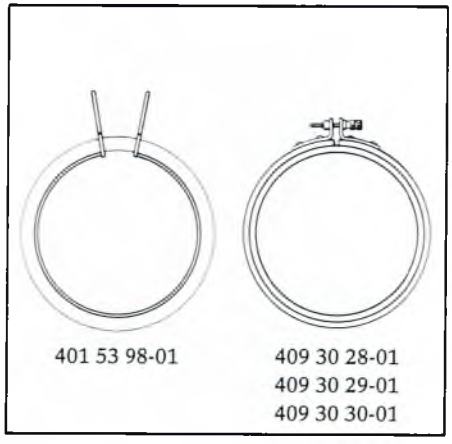
411 73 90-01. Darning foot. For darning with straight stitching the work is stretched in a hoop. For darning socks use zig-zag stitching. The material is guided by hand. Set presser foot pressure at darning symbol.



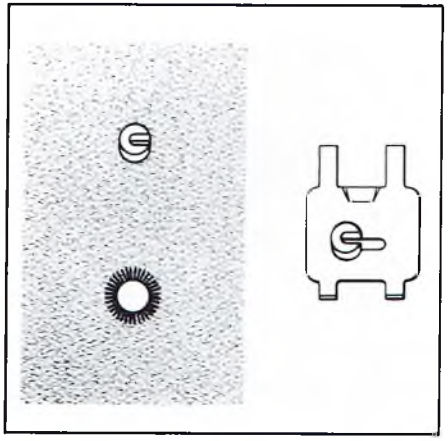
411 85 30-01. Presser foot with glide sole for sewing plastic-coated fabric, some leather imitations and other materials which tend to adhere to the metal presser feet.



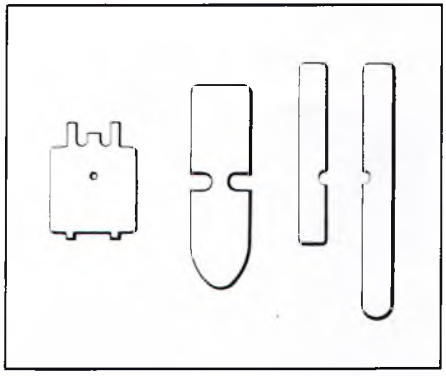
411 85 02-01. Presser foot for gathering. The fabric is gathered as it is sewn – the tighter the tension, the fuller the gathering. The gathered fabric can be sewn simultaneously to another ungathered fabric.



Frames for darning and embroidery.
401 53 98-01 5.5 cm diameter (2⅛″)
409 30 28-01 10 cm diameter (4″)
409 30 29-01 15 cm diameter (6″)
409 30 30-01 20 cm diameter (8″)



For making closing bars around holes, e.g. eyelets in belts, the feed dog is covered by a plate. Available for different hole-diameters.
412 00 71-01. Plate for eyelet 4 mm.
412 00 71-02. Plate for eyelet 6 mm.



412 00 68-01. Plate for darning and free-hand embroidery especially in light fabrics. Only for straight stitching.
412 01 41-01. Glide plates for sewing plastic-coated fabrics, leather imitations, etc. for presser foot C and E.

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